

Plenary Session 4
Prevention in the rapidly changing MSM communities of today.

Monday, 29 August 2011 (09.00 – 10.30)

Chair: Stuart Koe, APCOM and Developed Asia Network (DAN), Singapore

MoPS4-02: A syndemic Approach to Understand and Address the Continuing Spread of HIV Infection among Men Who Have Sex with Men and Transgenders in Asia and the Pacific

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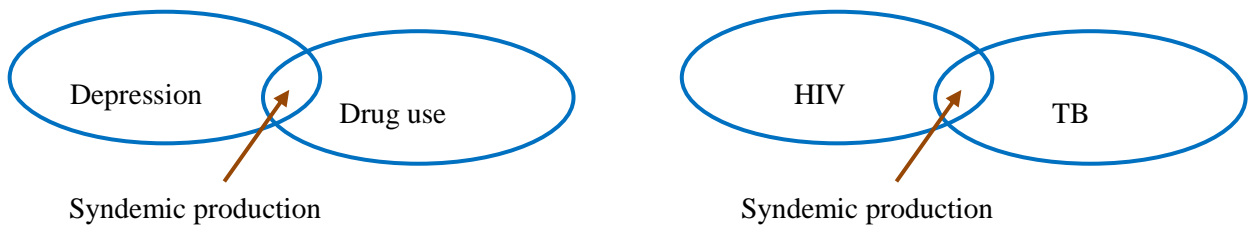
Multiple epidemics or conditions interacting synergistically, producing an extra burden of morbidity and mortality in a population

Term first used by Merrill Singer to describe a cluster of epidemics of substance abuse, violence, and AIDS disproportionately afflicting those living in poverty in US cities (Sinr, 1994, Soc Sci Med)

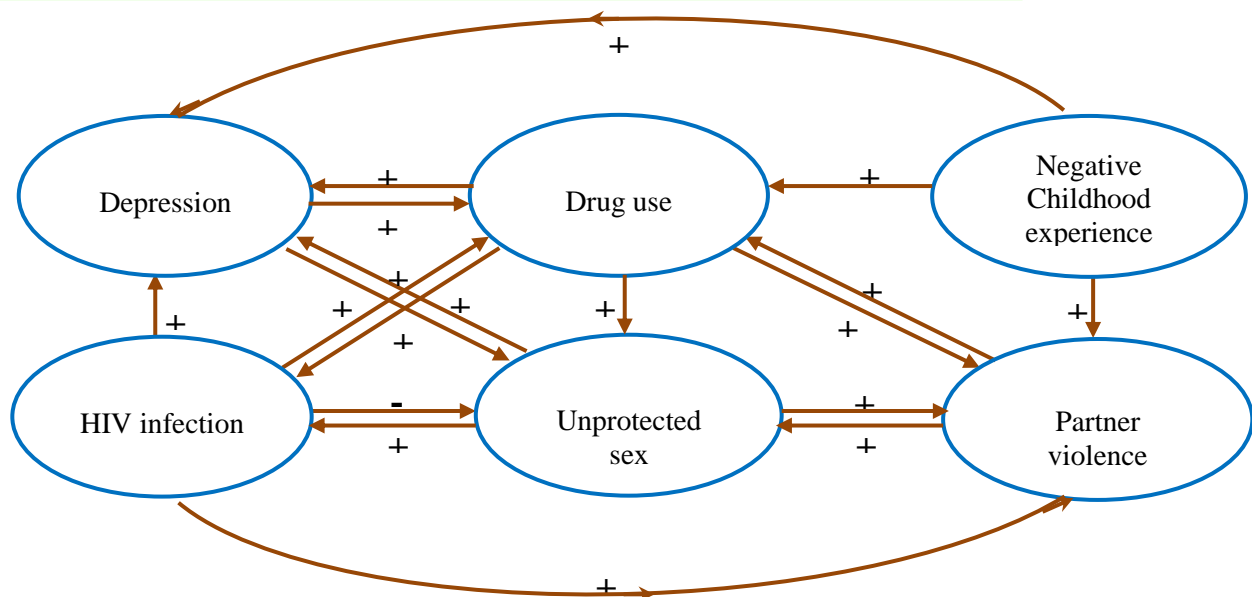
Definition: Syndemic

Related concepts: intertwining epidemics, linked epidemics, interacting epidemics, connected epidemics, co-occurring epidemics, co-morbidities, cluster of health crises, co-epidemics

Syndemic approach focuses on the intersection between epidemics



Syndemic production: how does it work?



Syndemics among MSM in United States

Psychosocial health problems among MSM magnify effects of HIV/AIDS

Stall et al., 2003 AmJ Public Health

- MSM; Chicago, Los Angeles, New York, San Francisco
- Poly-drug use, depression, partner violence, childhood sexual assault

Syndemic of health problem in young MSM

Mustanski et al., 2007 Ann Behav Med

- Young MSM (16 – 24 years); Chicago
- Alcohol use, street drug use, marijuana use, psychological distress, partner violence, sexual assault

Syndemic intenelty associated with more frequent arrest

Kurtz et al., 2008 J Psychoact Drugs

- Gay/bisexual men in Miami
- Substance abuse, victimization, mental health issues, arrest histories

Methods

Psychosocial health conditions

Variable	Definition
History of forced sex	Having been forced to have sexual intercourse against their will (lifetime)
Social isolation	Not having either a close friend or family member to talk to in case of personal problems (current)
Suicidal thoughts or actions	Having seriously thought about committing suicide or having tried to commit suicide (lifetime)
Club drug use	Using recreational drugs (ecstasy, methamphetamine, hetamine, nitrite inhalants, cocaine, or GHB) one or more times in the past 4 months
Alcohol intoxication	Becoming drunk 2-3 times per week or more in the past 4 months
Selling sex*	Having received money, gifts, or valuables from any partner in exchange for sex in the past 4 months

* involuntary, lack of choice – not subsistence sex work

Statistics

- Evaluated associations between psychosocial health conditions, unprotected sex, and HIV prevalence and incidence
 - Calculated bivariate odds ratios (OR) and 95% confidence intervals (95% CI) between pairs of psychosocial health conditions at baseline to see if they were associated

- Only those that were significantly associated with 2 or more other conditions were included in further analyses
- HIV prevalence: ($\#$ HIV positive men at baseline/total number of men) \times 100
- HIV incidence estimated by Kaplan-Meier survival analysis (date of infection taken as the midpoint between last negative and first positive date)
- Syndemi count
 - Counting the number of psychosocial health conditions each participant reported

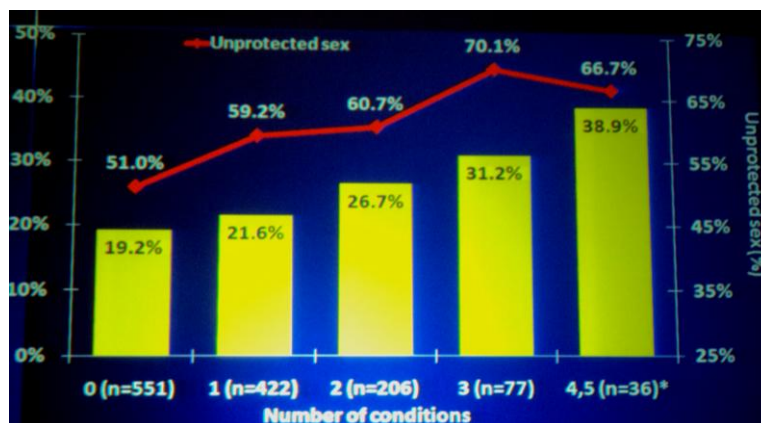
Baseline prevalence of psychosocial health conditions

Forced sex	18.9%	(n = 244)
Suicided	27.6%	(n = 354)
Social Isolation	57.6%	(n = 744)
Alcohol abuse	12.7%	(n = 164)
Club drug	15.2%	(n = 196)
Selling sex	19.9%	(n = 257)

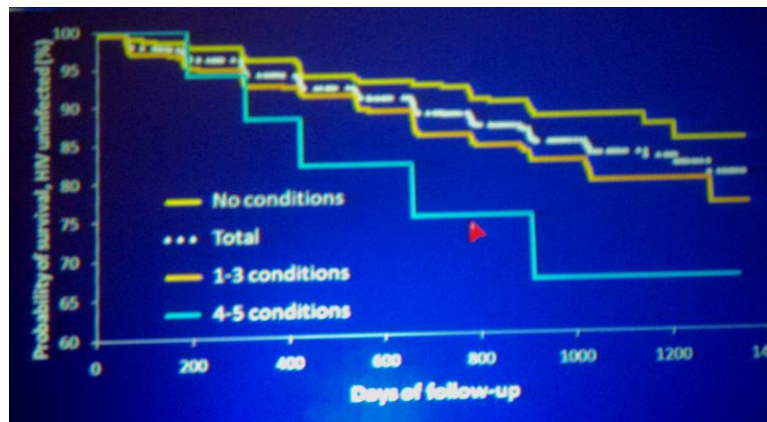
Dependent variables

- Unprotected sex at baseline
 - 56.8% reported unprotected sex (n = 734)
 - Suicidal thoughts/actions, alcohol consumption, and selling sex significantly related to unprotected sex
- HIV prevalence
 - Club drug use, selling sex, and a history of forced sex significantly related to HIV prevalence

HIV prevalence and unprotected sex by number of syndemic conditions



HIV incidence (Kaplan-Meier analysis) in the HIV-negative fraction of the cohort (N = 1,002)



Limitations

1. Cohort study not designed to investigate syndemics, although allows exploratory analysis
2. Method of counting conditions does not account for the possibility that psychosocial health conditions differ in magnitude
3. Count variable does not consider complex associations between conditions

Conclusions

- In this cohort of MSM/TG multiple epidemics of mental health conditions were indentified
- Each epidemic represents a serious threat to MSM/TG health
- In complex interaction these epidemics are driving and accelerating HIV risk and HIV infection in MSM/TG
- Progress in reducing the impact of one is likely being limited by lack of progress in the others
- We must address these epidemics in tandem if we ever want to be successful in stemming the HIV epidemic in MSM/TG
- Holistic and inclusive approaches in HIV prevention among MSM/TG are the way forward

Disclaimer

The views expressed herein are solely the responsibility of the author and do not necessarily represent the official views of the US Centers for Disease Control and Prevention

