



# Intervention Implications of a Syndemics Approach to HIV Prevention among Gay Men

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# Health Profile of Urban Gay Men

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## Very High Rates of Distress and Depression

**Mills, T.**, et al., Distress and Depression among Urban MSM, Am J Psychiatry, 2004; 161(4):776

## Very High Rates of Attempted Suicide

**Paul, J.**, et al., Suicide attempts among gay and bisexual men: lifetime prevalence and antecedents. AJPH 2002 92:1338-45.

## High Rates of Childhood Sexual Abuse

**Paul, J.**, et al., Understanding childhood sexual coercion as a predictor of sexual risk-taking among MSM. Child Abuse and Neglect 1002 25:557-584.

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# Health Profile of Urban Gay Men

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## Very High Rates of HIV Infection

**Catania, J.**, et al., The continuing HIV epidemic among MSM. AJPB 2001 91:907-914.

## Very High Rates of Substance Use and Abuse

**Stall, R.**, et al., Alcohol use, drug use and alcohol-related problems among MSM. Addiction 2001 96:1589-1601.

## Very High Rates of Partner Violence

**Greenwood, G.**, et al., Battering victimization among a probability-based sample of MSM. AJPB 2002 92:1964-1969.

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# Intertwining Epidemics among Urban

**MSM** (Significant OR estimates, controlling for age, education, race, income, HIV status and sexual risk)

	<b>Childhood Sex Abuse</b>	<b>Partner Violence</b>	<b>Depression</b>	<b>Substance Abuse</b>
<b>Childhood Sex Abuse</b>	-----	1.9	1.9	
<b>Partner Violence</b>	1.9	-----	1.6	2.2
<b>Depression</b>	1.9	1.6	-----	1.4
<b>Substance Abuse</b>		2.2	1.4	-----

# Intertwining Epidemics Predict HIV Prevalence and High Risk Sexual Behavior

	No. of Psychosocial Health Problems			
	0 ( <i>n</i> = 1,392)	1 ( <i>n</i> = 812)	2 ( <i>n</i> = 341)	3 or 4 ( <i>n</i> = 129)
Recent high risk sex	7%	11%	16%	23%
HIV prevalence	13%	21%	27%	22%

All associations have  $p$ 's < 0.001. All  $p$  values are two-tailed.

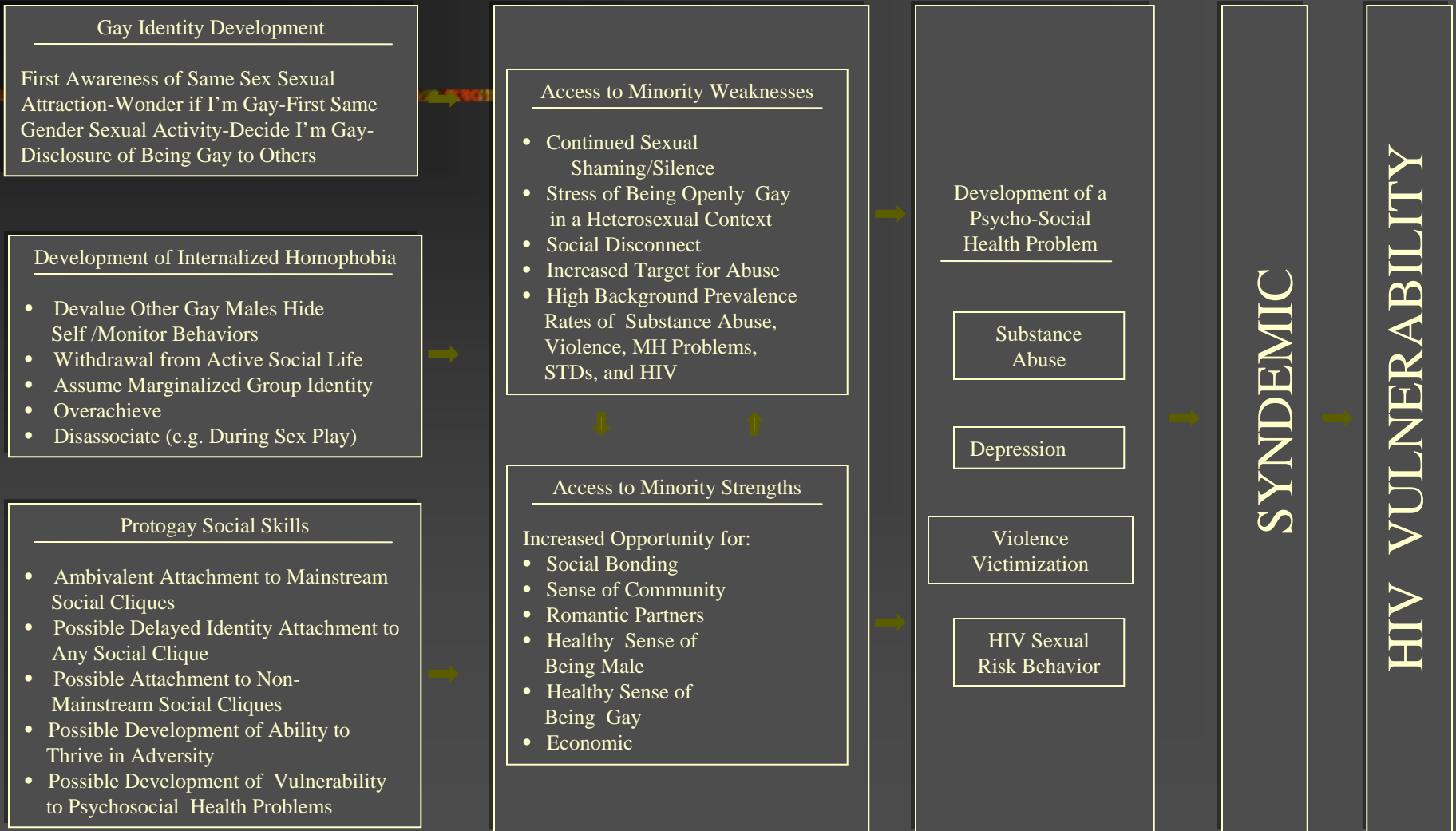
From Stall et al., 2003

# Syndemic:

- (n.) *a cluster of epidemics that act additively to predict other epidemics*
- (adj.) *of or pertaining to such a cluster\**
- [www.cdc.gov/syndemics](http://www.cdc.gov/syndemics)

\*from Singer, 1994

**Contextual Stressors:** Socioeconomic, Racial/Ethnic Family of Origin (Abuse, Parental Psychopathology/Substance Abuse)  
**General Stressors of Urban Life:** Higher Costs of Living, Relative Anonymity



**Masculine Socialization Stress:** Shaming and Other Punishment of Gay Males for Failing to Achieve Masculine Ideals

**Cultural Homophobia:** Cultural Norms and Institutional Policies that Discriminate Against Gay Men (e.g. Marriage, Adoption, Tax Laws, Military Service, "Glass Ceiling" in Professional Settings)

# Corollaries of Syndemics Theory

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- Syndemic processes should already be in place among very young gay men/adolescents.
  - Addressing multiple epidemics may raise levels of HIV prevention effectiveness.
  - Resilience may be an untapped resource in HIV intervention design.
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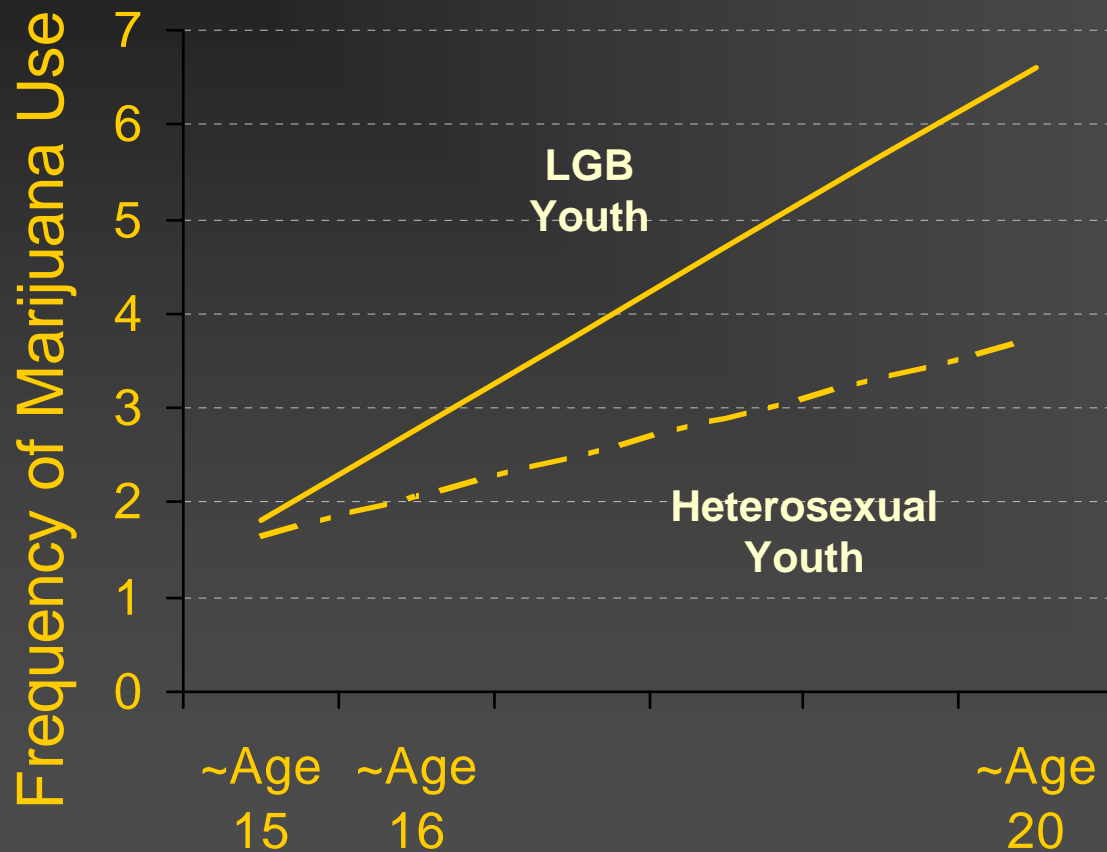
# Substance Use among LGBT Adolescents

**Marshall**, et al., "Sexual orientation and adolescent substance use: A meta-analysis and methodological review", *Addiction*, 2007, 103:546-556 .

Drug	Recent Use	Lifetime Use
Cigarettes	2.8	4.2
Alcohol	2.6	2.2
Heavy Alcohol	1.3	--
Marijuana	1.6	2.6
Cocaine	3.3	3.1
IDU	2.9	7.2
Any drug	4.4	3.1

# Individual Trajectories of Substance Use among LGBT Youth

Marshal, Friedman, Stall, Thompson – In Press, Addiction



# Sexual Orientation, Child Abuse, and Health Outcomes: A Meta-Analysis

Friedman, M., et al., (2008) Society for Research on Adolescence Biennial Meeting

	Child/Adol'cent <b>Physical Abuse</b>		Child/Adol'cent <b>Sexual Abuse</b>		Child/Adol'cent <b>Emotional Abuse</b>	
	OR	K	OR	K	OR	K
Gay/Bi Males	1.9*	(8)	7.2*	(7)	1.4**	(3)
Lesbian/Bi Females	1.7*	(8)	1.9*	(9)	1.3**	(3)
* $p < .01$ ; ** $p < .05$						

# Relationship between early abuse and adult health outcomes

<u>Forced sex</u>	<u>Yes</u>	<u>No</u>
Partner Abuse**	56.1	32.9
Depression**	25.9	13.9
Unprotected Anal (1 yr.)**	30.9	21.5
HIV +**	24.0	17.6
Suicide Attempt **	10.4	5.8
GR Victimization**	22.0	15.3

\*\* =  $p < .01$

Note: Regression analyses controlled for age, race, income, HIV status, same- versus bisexually-sexually attracted

# Relationship between early abuse and adult health outcomes?

Harrassment	<u>Yes</u>	<u>No</u>
Partner Abuse *	41.6	34.8
Depression (p=.11)	17.7	14.7
GR Victimization **	21.1	9.5

Physical abuse	<u>Yes</u>	<u>No</u>
Partner Abuse *	47.2	37.3
Depression **	25.6	14.3
Suicide Attempt *	10.1	5.8
HIV+ (p<.10)	23.1	18.9

\* =  $p < .05$       \*\* =  $p < .01$

Note: Regression analyses controlled for age, race, income, HIV status, same- versus bisexually-sexually attracted

# Depression and Suicide Disparities between LGBT and Hetero Adolescents

Marshal, Friedman, Stall, D'Augelli, Dietz, Brent, Smith, McGinley (in preparation)

Suicide Overall Odds Ratio: 2.98 (17 Studies)

Overall Odds w/ One Study Removed: 2.65-3.14

Null Studies Needed to Make Odds  $p > .05$ : 3,076

Depression Overall Odds Ratio: 1.94 (10 Studies)

Overall Odds w/ One Study Removed: 1.83-2.04

Null Studies Needed to Make Odds  $p > .05$ : 291

# Intervention Implications for Gay Youth

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- Study the uncontrolled effects of enforcement of anti-bullying laws on the health of gay adolescents
  - Conduct an RCT trial of an intervention to enforcement of anti-bullying laws on all school-attending adolescents.
  - Study programs to provide housing and social re-integration of gay street youth.
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# Syndemic Interventions for Adult Gay Men

- Conduct mediation analyses of existing intervention trials to test whether higher substance use, depression, partner violence reduce intervention response.
- Study effects of “raising all of the health boats” on increased HIV prevention among gay men on a community level.
- Consider structural interventions to disentangle syndemic processes.

# What about resilience?

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# Where is the evidence for resilience in this table?

	No. of Psychosocial Health Problems			
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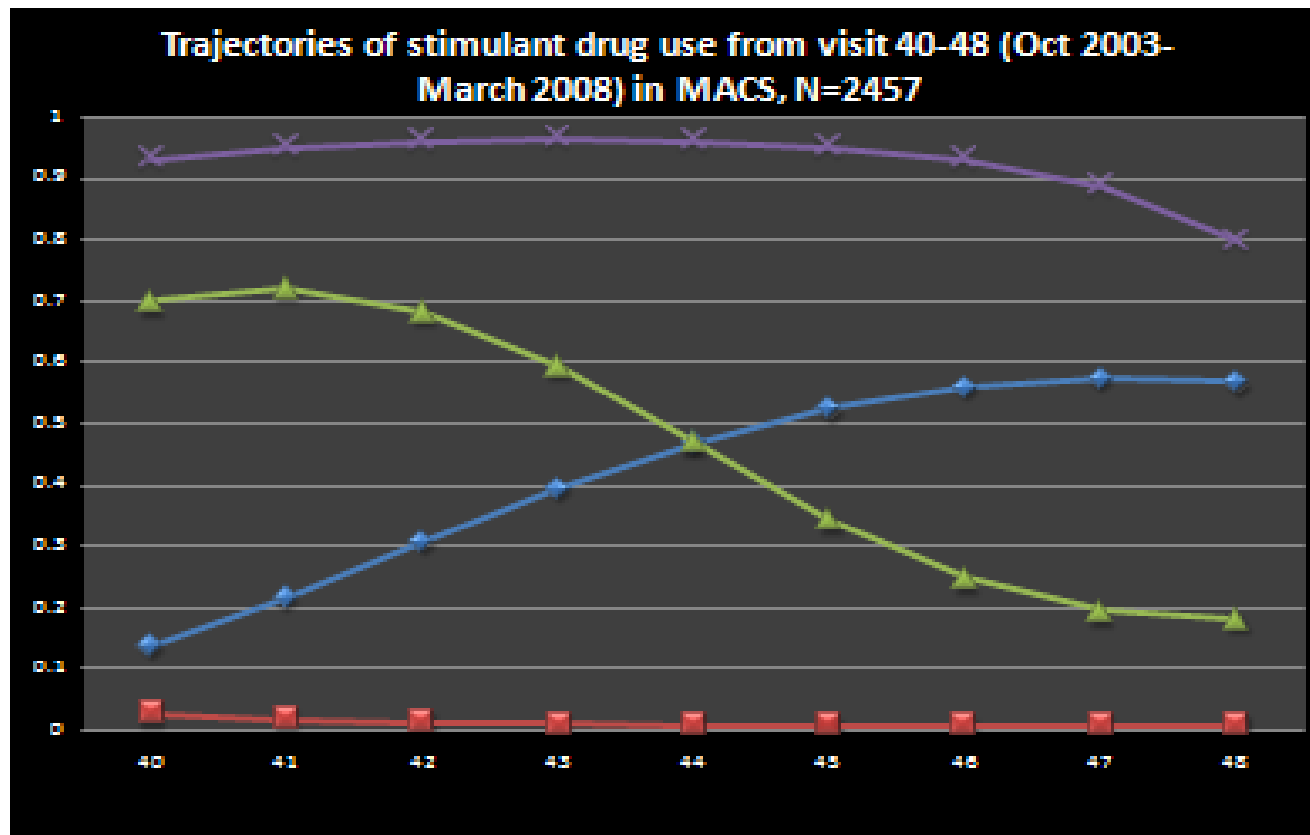
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From Stall et al., 2003

# Additional Evidence for Resilience

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- Gay men quit smoking at high rates.
  - Gay men have high exposure to substance use but surprisingly low levels of problematic use.
  - Gay men resolve heavy substance use over time.
  - Response to the AIDS epidemic/ civil rights movement
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“No use” 68.8%, “Some use” 7.2%, “Increasing” 5.8%,  
 “Decreasing” 8.5% “Consistently high” 10.5%

# Intervention Implications to Tap Resiliencies among Gay Men

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- Study “spontaneous remission” among gay men
  - Study how men with multiple syndemic conditions remain sexually safe and HIV negative over time
  - Study community mobilization patterns that strengthen community interactions
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# Concluding Thoughts:

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- Multiple dangerous epidemics afflict urban gay male communities; each of them important and each interacting with the other.
  - These epidemics interact to drive HIV risk and HIV infection among gay men.
  - Progress on fighting any one of these epidemics is likely to be limited by lack of progress in fighting other interactive epidemics in tandem.
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# How do you raise all of the boats?

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- Partnerships should be formed across the health bureaucracies that serve gay men to coordinate activities, referrals and services.
  - Attention should also be paid to the policy front: are improvements in citizenship rights for LGBT populations associated with improved health?
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# Maybe it's not the homosexuality; maybe it's the *homophobia*

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- Violence victimization of young gay men is commonplace
  - Violence victimization in adolescence predicts poor health outcomes among the general population as well as gay men
  - The experience of homophobic attacks at a very early age may be a root cause of syndemics within gay male communities
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# Thinking upstream...

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- Protect our youth
  - Support gay male community building within urban centers and within communities of origin
  - Adopt a life-course perspective on gay men's health
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# Thinking upstream...

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- Improve public health practice for gay men
  - Address minority/low SES health issues for gay men
  - Fight stigma by supporting the growth of gay communities in all American cities
  - Understand resilience among gay men
  - How would this approach translate to LBT populations?
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# Invest in Understanding Resilience

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- “Deficit” analysis of Depression:
- Correlates of Depressed Mood:
  - Not having a primary partner
  - Not identifying as gay/queer/homosexual
  - $\geq 1$  anti-gay violent attack in past 5 years
  - Alienation from gay community

Mills, T., et al., Distress and Depression among Urban MSM, Am J Psychiatry, 2004; 161(4):776

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Would changes in domestic partnership/marriage laws lower rates of depression among gay men by:

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# Acknowledgment of the Depth of Our Commitments to Each Other?



Chronicle / Liz Mangelsdorf

# Strengthening Connections to and Protection of Our Families?



# Strengthening Connections to Our Traditions and Spiritual Lives?



Chronicle / Kim Komenich

# Strengthening Connections Within Our Community?



Chronicle / Kurt Rogers

# Strengthening Connections to Society at Large?



Chronicle / Paul Chinn

# One Case for Studying Resilience

- LGBT Communities have mounted an ongoing civil rights campaign during the midst of the AIDS epidemic and co-occurring epidemics in our communities.
- This alone suggests that strength based approaches to our community have been under-appreciated.
- It's time to address weaknesses AND tap strengths in intervention design.