CONTROLLING THE HIV EPIDEMIC WITH

ANTIRETROVIRALS



High Impact Prevention – Why Pills Alone Are Not the Silverbullet.

Silverbullets, PreP, TasP, Stigma and Serious Mental Ill-health.



Serious Mental Ill-health (SMI)

- 1 in 4 people in the UK will experience a mental health problem in their lifetime, and 1 in 6 adults have a mental health problem at any given time. 16,17
- Almost ½ of adults will experience an episode of depression in their lifetime. 18

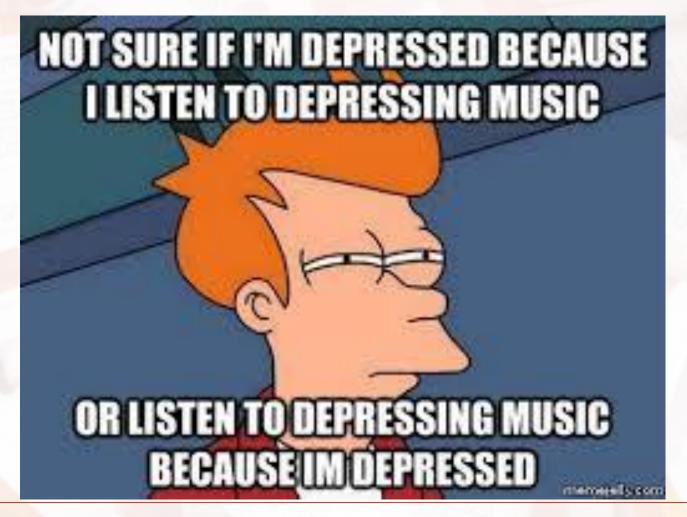
HIV Prevalence in people with SMI

Author(s)	Country	Year of publication	Setting	Prevalence
Sacks, et al.	USA	1992	In-patient	7%
Susser, Valencia, & Conover	USA	1993	Community	19%
Ayuso-Mateos et al.	Spain	1997	In-patient	5%
Segal, Gomory, & Silverman	USA	1998	Community	4.5%
Blank et al.	USA	2002	In-patient	1.8%
Klinkenberg et al.	USA	2003	Community	6.2%
Rosenberg et al.	USA	2005	Community & In-patient	3%
Pirl et al.	USA	2005	In-patient	29%
Carey et al.	India	2007	In-patient	1.7%
Alvarado-Esquivel et al.	Mexico	2008	In-patient	0.9%
Rothbard et al.	USA	2009	In-patient	10%
Kakisi et al.	Greece	2009	In-Patient	0.7%
Collins et al.	South Africa	2009	In-patient	26.5%
Singh, Berkman, & Bresnehan	South Africa	2009	In-patient	29.1%
Sanger et al.	UK	2013	In-Patient	5.3%
King, Creighton, Nalabanda, Evans	UK - Hackney	Currently Unpublished	In-patient	1.6%

Prevalence of SMI in people with HIV

- The prevalence of psychological and psychiatric problems among people living with HIV is substantially higher than in the general population¹⁹⁻²¹
- 7/10 women and 5/10 men recently surveyed reported experiencing a mental health problem in the last year⁴⁰
- People with HIV are about twice as likely to be diagnosed with depression as matched controls in the general population²²

Chicken or Egg?



Risk Factors associated with HIV infection in people with SMI

- Characteristic risks: substance misuse, **psychiatric illness severity and symptoms**, poverty, homelessness, incarceration, urban residence, and ethnic minority status, **history of traumatic abuse** ^{2, 3,}
- High risk behaviours: **injecting drug use**, alcohol misuse,⁴ coercive sex, sex with multiple partners,⁵ commercial sex, and unprotected sex⁶.
- Similar to everyone else, right?

Diagnosis of SMI & risk

SMI diagnosis associated with:

- impaired judgment
- decreased cognitive function
- impaired reality testing
- decreased impulse control
- self-destructive behaviour
- difficulties with interpersonal relationships
- impaired condom negotiation
- higher risk sexual behavior ^{7,8}

Risk & Mental Ill-Health

- During acute phase of illness, sexual activity increased for people living with bipolar affective disorder and schizophrenia. ¹⁰
- Mental Health Stigma has been described as playing a role in HIV risk-taking in women ¹¹, ethnic minorities ¹², WSW ¹³, and young MSM with depressive symptoms ¹⁴.
- Link described between relationship discrimination, (perceiving that one's mental illness restricts opportunities for romantic relationships) and increased sexual risk taking¹⁵.

SMI & HIV Testing

- •Screening services are not routinely offered by mental health providers to address HIV and other BBVs, despite strong clinical support for this screening to become routine practice²⁹⁻³⁴.
- •Local audit in London has shown very low rates of testing in psychiatric settings.
- •Barriers to testing include:
 - Provider barriers around discussion of HIV risk, sexuality, consent.
 - Service user refusal of tests
 - Systemic barriers to timely testing and pathways to HIV care

SMI & Health Promotion

- People living with SMI were found to have significantly lower HIV knowledge than the general population with regard to risk, transmission and prevention strategies.²³⁻²⁷
- Risk behaviors for HIV are the same for people living with SMI as the rest of the general population (UPSI with multiple partners, IVDU).
- The frequency of risk behaviors, associated stigma, and apparent reduced knowledge of prevention methods converge to develop a high-risk profile for this group.

SMI, Adherence & Engagement

Mental health problems complicate the care and clinical management of people with HIV:

- decrease rates of adherence to antiretroviral therapy³⁵
- increase rates of loss to follow-up³⁶
- Frequent hospital admissions and periods of mental health crisis and medication interruption.
- Perceived stigma and poorly adapted services act as barriers to attending conventional clinic settings.³⁸

Complex factors affecting Outcomes

Difficulty with adherence to complex medication regimens

Low Rates of Testing
Health provider stigma
Systemic barriers

Poorer Outcomes
Onward Transmission
Increased mortality

Stigma, high risk behaviour, socio-demographic and lifestyle factors

Difficulty accessing & engaging with usual models of care (i.e. Primary Care, Specialist Appointments)

Low uptake & provision of primary prevention & health promotion

Silver bullet? Or One size fits all/Round hole, square peg?



Future Directions

While TasP & PreP may provide a large piece of the puzzle of stopping the HIV epidemic, there remains a need for:

- •Improved access to testing & sexual health services, (outreach into services that people with SMI access).
- •increased specialized prevention efforts for people with SMI, aimed at improving motivation and skills that are needed for HIV prevention, and maintenance on treatment.²⁸
- •Challenging stigma across professions to create integrated care pathways between mental health services & HIV treatment.

Acknowledgements

- 1) Keiser, O., Spoerri, A., Brinkhof, M.A.G. Hasse, B., Gayet-Ageron, A., Tissot, F., Christen, A., Battegay, M., Schmid, P., Bernasconi, E., Egger, M. (2009) Suicide in HIV-Infected Individuals and the General Population in Switzerland, 1988–2008 *American Journal of Psychiatry 167:143-150*.
- Sacks, M.H., Perry, S., Graver, R., Shindledecker, R.D. (1990) *Self-reported HIV-related risk behaviors in acute psychiatric inpatients: a pilot study.* Hospital & Community Psychiatry 41(11): 1253-1255
- 3) McKinnon, K. Cournos, F., Herman, R. (2002) *HIV Among People with Chronic Mental Illness*. Psychiatric Quarterly 73(1): 17-31
- 4) Rosenberg, S.D., Drake, R.E., Brunette, M.F., Wolford, G.L., March, B.J. (2005) *Hepatitis C virus and HIV co-infection in people with severe mental illness and substance misuse disorders*. AIDS 19: S26-S33
- Cook, J.A., Razzano, L., Jayaraj, A., Myers, M., Nathanson, F., Stott, M.A., Stein, M. (1994) *HIV-risk assessment for psychiatric rehabilitation clientele: implications for community based services.* Psychosocial Rehabilitation Journal 17(4): 105-115
- Rothbard, A.B., Metraux, S., Blank, M.B. (2004) Cost of care for Medicaid recipients with serious mental illness and HIV infection or AIDS. Psychiatric Services 54(9): 1240-1246
- 7) Malow, R.M., Devieux, J.G., Martinez, L., Peipman, F., Lucenko, B.A., Kalichman, S.C. (2006) *History of traumatic abuse and HIV risk behaviors in severely mentally ill substance abusing adults*. Journal of Family Violence 21(2): 127-137
- 8) Carey, M.P., Carey, K.B., Kalichman, S.C. (1997) *Risk for human immunodeficiency virus (HIV) infection among persons with severe mental illness.* Clinical Psychological Review 17: 271-291
- 9) Weiser, S.D., Wolfe, W.R., Bangsberg, D.R. (2004) *The HIV epidemic among individuals with mental illness in the United States*. Current Infectious Disease Reports 6: 404-410
- Hariri A.G., Karadag, F., Gokalp, P., Aksoy, U.M. (2009) Awareness of Sexually-Transmitted Diseases and Risky Sexual Behavior in Bipolar Patients: A Comparative Study with Healthy Controls. Archives of Neuropsychiatry 46: 52-60
- 11) Collins, P.Y., von Unger, H., Armbrister, A. (2008) *Church ladies, good girls, and locas: Stigma and the intersection of gender, ethnicity and HIV-risk.* Social Science & Medicine 67(3): 389-397
- Collins P.Y., Elkington, K.S., von Unger, H., Sweetland, A., Wright, E.R., Zybert, P.A. (2008) *Relationship of stigma to HIV risk among women with mental illness*. American Journal of Orthopsychiatry 78(4): 498-506

References

- 13) Reisner S.L., Mimiaga, M., Case, P., Grasso, C., O'Brien, C.T., Harigopal, P., Skeer, M., Mayer, K.H. (2010) Sexually transmitted disease (STD) diagnoses and mental health disparities among women who have sex with women screened at an urban community health center, Boston, Massachusetts, 2007. Sexually Transmissible Diseases 37(1): 5.
- 14) Salomon, E.A., Mimiaga, M.J., Husnik, M.J., Welles, S.L., Manseau, M.W., Montenegro, A.B., Safren, S.A., Koblin, B.A., Chesney, M.A., Mayer, K.H. (2009) *Depressive symptoms, utilization of mental health care, substance use, and sexual risk among young men who have sex with men in EXPLORE: implications for age-specific interventions.* AIDS & Behaviour 13(4): 811-821
- 15) Elkington, K.S., Bauermeister, J.A., Zimmerman, M.A. (2010) *Psychological Distress, Substance Use, and HIV/STI Risk Behaviors among Youth.* Journal of Youth Adolescents. 2010 May; 39(5): 514–527.
- 16) HM Government. No Health Without Mental Health; 2011.
- 17) McManus S et al. Adult Psychiatric Morbidity in England, 2007: Results of a Household Survey; 2009. Leeds: NHS Information Centre for Health and Social Care.
- 18) Andrews G et al. (2005) Br J Psychiatry; 187: 495-496.
- 19) Bing EG et al. Arch Gen Psychiatry 2001; 58: 721-728.
- 20) World Health Organization. HIV/AIDS and Mental Health. EB124/6 20 November 2008. Available at http://apps.who.int/gb/ebwha/pdf files/EB124/B124 6-en.pdf.
- 21) Harding R et al. Sex Transm Infect 2010; 86: 520-524.
- 22) Ciesla JA, Roberts JE. Am J Psychiatry 2001; 158: 725-730.
- 23) Goldberg, R.W., Himelhoch, S., Kreyenbuhl, J., Dickerson, F.B., Hackman, A. Fang, L.J., Brown, C.H., Wohlheiter, K.A., Dixon, L.B. (2005) *Predictors of HIV and hepatitis testing and related service utilization among individuals with serious mental illness.* Psychosomatics 46(6): 573-577

References

- 24) Melo, A.P.S., Cesar, C.C., de Assis Acurcio, F., Campos, L.N., das Gracas Braga Ceccato, M., Wainberg, M.L., McKinnon, K., Guimaracs, M.D.C. (2010) *Individual and treatment settings predictors of HIV/AIDS knowledge among psychiatric patients and their implications in a national multisite study in Brazil*. Community Mental Health Journal 46: 505-516
- 25) Shield H., Fairbrother, G., Obmann, H. (2005) Sexual health knowledge and risk behavior in young people with first episode psychosis. International Journal of Mental Health Nursing 14: p149-154
- 26) Chuang, Henry T., and Mark Atkinson. "AIDS knowledge and high-risk behaviour in the chronic mentally ill." *Canadian journal of psychiatry. Revue canadienne de psychiatrie* 41.5 (1996): 269-272.
- 27) Grassi, L., Biancosino, B., Righi, R., Finotti, L., Peron, L. (2001) *Knowledge about HIV transmission and prevention among Italian patients with psychiatric disorders*. Psychiatric Services 52(5): 679-681
- 28) Kloos, B., Gross, S.M., Meese, K.J., Meade, C.S., Doughty, J.D., Hawkins, D.D., Zimmerman, S.O., Snow, D.L., Sikkema, K.J. (2005) *Negotiating Risk: Knowledge and use of HIV prevention by persons with serious mental illness living in supportive housing.* American Journal of Community Psychology 36(3-4): 357-372.
- 29) Goldberg, R.W., Himelhoch, S., Kreyenbuhl, J., Dickerson, F.B., Hackman, A. Fang, L.J., Brown, C.H., Wohlheiter, K.A., Dixon, L.B. (2005) *Predictors of HIV and hepatitis testing and related service utilization among individuals with serious mental illness.* Psychosomatics 46(6): 573-577
- 30) Desai, M.M., Rosenheck, R.A., Desai, R.A. (2007) Prevalence and correlates of human immunodeficiency virus testing and post-test counseling among outpatients with serious mental illness. Journal of Nervous & Mental Disease 195(9): 776-780
- 31) Walkup, J., McAlpine, D.D., Olfson, M., Boyer, C., Hansell, S. (2000) Recent HIV testing among general hospital inpatients with schizophrenia: findings from four New York City sites. Psychiatric Quarterly 71(2): 177-193
- 32) Joska, J.A., Kaliski, S.Z., Benatar, S.R. (2008) *Patients with severe mental illness: a new approach to testing for HIV*. South African Medical Journal 98(3): 213-217

References

- 33) Ziedonis, D.M., Smelson, D., Rosenthal, R.N., Batki, S.L., Green, A.I., Henry, R.J., Montoya, I., Parks, J., Weiss, R.D. (2005) *Improving the care of individuals with schizophrenia and substance use disorders: consensus recommendations.*Journal of Psychiatric Practice 11(5): 315-339
- 34) Sanger, C., Hayward, J., Patel, G., Phekoo, K., Poots, A.J., Howe, C., Bowden-Jones, O., Green, J. (2013) Acceptability and necessity of HIV and other blood-borne virus testing in a psychiatric setting. The British Journal of Psychiatry 202:307-308
- 35) Gonzalez JS et al. J Acquir Immune Defic Syndr 2011; 58(2): 181-187.
- 36)Smart T. Mental health and HIV: A Critical Review. *HIV & AIDS Treatment in Practice 145*; 2009. London: NAM Publications. Available at: http://www.aidsmap.com/Mental-health-and-HIV-a-clinical-review/page/1330115/.
- 37)Leserman J. *Psychosom Med* 2008; 70: 539-545.
- 37) Mitchell, A.J., Selmes, T. (2007) Why don't patients attend their appointments? Maintaining engagement with psychiatric services. Advances in Psychiatric Treatment 13: 423-434.