Suicide and HIV

Kristen G. Shirey

Suicidal ideation, attempts, and completions are common among people living with HIV/AIDS (PLWHA). Recent cohort studies have found that the rate of suicide completion among PLWHA in Switzerland is three times that of the general population, and, in the USA, one in five HIV positive patients report having had suicidal ideation in the previous week. Many factors contribute to this phenomenon, including highly prevalent comorbid depression, substance use disorders, social isolation, stigma, and chronic pain and fatigue associated with the disease. During the early years of the HIV epidemic, suicide rates in the USA and Western Europe were extremely high, particularly among men. With the advent of combination antiretroviral therapy (cART), and resultant prolonged life expectancy, suicide rates have declined and are now similar to those of other populations living with chronic medical illnesses such as amyotrophic lateral sclerosis, end-stage renal disease, and spinal cord injury. However, even with the decline in suicide rates since the 1990s, suicidal ideation and behaviors remain alarmingly high among PLWHA, and it is urgent for providers caring for this population to evaluate and address suicide risk in routine clinical practice.

Though life expectancy for HIV positive patients has improved dramatically with cART, it remains lower than that of the general population. Further, cART is often accompanied by a number of adverse side effects and toxicities that markedly impair quality of life. Certain antiretroviral drugs, notably the non-nucleoside reverse transcriptase inhibitor efavirenz, directly cause neuropsychiatric side effects including depression and worsening suicidal ideation. Some characteristics of those who complete suicide have changed since the pre-cART era; now suicide completers more commonly have an underlying diagnosis of mental illness and are

K.G. Shirey (✉)
Department of Psychiatry and Behavioral Sciences, Duke University Medical Center, Durham, NC, USA

Department of Medicine, Duke University Medical Center, Durham, NC, USA
e-mail: kristen.shirey@duke.edu

S. Loue (ed.), *Mental Health Practitioner's Guide to HIV/AIDS*,
DOI 10.1007/978-1-4614-5283-6_85,

likely to have received some treatment for mental illness. In the 1980s and 1990s, pre-cART, suicide completion appeared to be influenced more by HIV disease progression than by psychiatric comorbidities. The associations between mental illnesses, particularly depression, and HIV are complex. People with baseline mental illness and substance use disorders are at elevated risk for contracting HIV due to increased risk behaviors. Once infected, people with mental illness or substance use disorders are at increased risk of transmitting the virus to others. Such comorbidities are associated with suicidal ideation and behaviors in those without HIV, so adding this stressor compounds risk in an already vulnerable population.

While the risk of suicide in PLWHA is elevated throughout the lifespan, there are points during the disease course during which individuals are at particularly high risk. These points include time of HIV diagnosis, signs of disease progression such as first opportunistic infection or diagnosis of AIDS, changes in medication regimen, and stressful live events related to bereavement or disease-related stigma. In contrast to pre-cART era suicide rates that did increase with disease progression, there is no longer a clear relationship between suicide attempt and duration of HIV infection. In fact, some studies suggest that HIV positive individuals develop effective coping strategies over the course of the illness that lead to reduced suicide risk over time. Apart from the stress of having a chronic disease compiled with other stressors and comorbidities in the lives of PLWHA, the HIV virus itself may increase suicide risk in that individuals with HIV associated dementia complex can experience mood lability, impulsivity, and impaired judgment that heighten suicide risk.

Almost all studies of suicidal ideation, attempts, and completions have taken place in the developed world, where only 15 % of suicides occur. In the developing world, where 85 % of suicides occur, and where the burden of the HIV epidemic lies, the relationship between suicide and HIV status is not as well characterized. In North America and Western Europe, suicide has traditionally been associated with mental illnesses, particularly depression and alcohol abuse. However, studies in Asian countries suggest that different risk factors play a greater role in suicide, including impulsiveness, financial stress, and interpersonal conflict.

The issues of suicidal ideation and attempts among PLWHA are challenging indeed, related to complex relationships between psychosocial stressors, comorbid mental illness and substance use disorders, and the HIV virus itself through a combination of direct effects of the virus on mediating symptoms such as fatigue and cognitive changes, adverse side effects and impaired quality of life from cART, and the stigma and social isolation associated with HIV. While this is a complicated problem and the challenges are many, it is clear that suicidal ideation and attempts are a major source of suffering and mortality and need to be addressed. Clinicians should routinely screen HIV positive patients, no matter what stage of disease, for suicidal ideation and for comorbid psychiatric illness and should treat and refer accordingly. Individual and group psychotherapy may greatly benefit in providing support and bolstering coping skills. Psychotropic medications, including antidepressants, are generally well tolerated even in combination with cART and effectively treat comorbid depression that so frequently contributes to suicide in

PLWHA. Further, in collaboration with prescribers of cART, regimens can be tailored to avoid medications such as efavirenz that may escalate risk in at-risk individuals.

Related Topics: Cognitive impairment, HIV-associated dementia, mental health comorbidity and HIV/AIDS, stigma and stigmatization, substance use.

Suggested Reading

Baidee, J., Moore, D. J., Atkinson, J. H., Vaida, F., Gerard, M., Duarte, N. A., et al. (2011). Lifetime suicidal ideation and attempt are common among HIV+ individuals. *Journal of Affective Disorders*. doi:10.1016/j.jad.2011.06.044 (epub ahead of print).

Carrico, A. W., Johnson, M. O., Morin, S. F., Remien, R. H., Charlebois, E. D., Steward, W. T., et al. (2007). Correlates of suicidal ideation among HIV-positive persons. *AIDS, 21*, 1199–1203.

Clifford, D. B., Evans, S., Yang, Y., Acosta, E. P., Goodkin, K., Tashima, K., et al. (2005). Impact of efavirenz on neuropsychological performance and symptoms in HIV-infected individuals. *Annals of Internal Medicine, 143*, 714–721.

Keiser, O., Spoerri, A., Brinkhof, M. W. G., Hasse, B., Gayet-Ageron, A., Tissot, F., et al. (2010). Suicide in HIV-infected individuals and the general population in Switzerland, 1998–2008. *American Journal of Psychiatry, 167*, 143–150.

Robertson, K., Parsons, T. D., Van der Horst, C., & Hall, C. (2006). Thoughts of death and suicidal ideation in nonpsychiatric human immunodeficiency virus seropositive individuals. *Death Studies, 30*(5), 455–469.