

# FPIN's Help Desk Answers

## What Is the Association Between People Living With HIV/AIDS and Suicide Attempts?

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### Clinical Question

What association exists between people living with HIV/AIDS and suicide attempts?

### Evidence-Based Answer

People living with HIV/AIDS should be screened regularly for suicidal thoughts because suicide attempts are significantly higher in this cohort compared with the general population. (Strength of Recommendation: A, systematic review of cross-sectional and cohort studies.) In people living with HIV/AIDS, depression and a family history of suicide increase the risk of future attempts.

### Evidence Summary

A 2022 systematic review and meta-regression of 43 studies (10 cohort and 33 cross-sectional studies) from 16 countries examined the suicidality rates and risk factors among people living with HIV/AIDS (n = 170,234).<sup>1</sup> Patients had a mean age of 56 years and 67% were male. Primary outcomes were the prevalence of suicidal ideation, suicide attempts, and suicide completions. The studies included self-identified risk factors

of sex, age, sexual orientation, marital status, education level, and other contributing factors. Among people living with HIV/AIDS, the prevalence of suicidal ideation was 22% (33 studies; n = 24,939; 95% CI, 17% to 28%). The prevalence of suicide attempts was 9.6% (17 studies; n = 9,149; 95% CI, 6.3% to 15%), and the prevalence of suicide completions was 1.7% (eight studies; n = 144,723; 95% CI, 1% to 2.8%). The rate of suicide completion was higher in people living with HIV/AIDS than in the general population (0.3 vs. 0.1 per 100 person-years). The most significant risk factors for suicide attempts in people living with HIV/AIDS were a diagnosis of depression (four studies; n = 1,783; relative risk [RR] = 1.7; 95% CI, 0.7 to 2.7) and family history of suicide (two studies; n = 738; RR = 1.1; 95% CI, 0.16 to 2.06). Suicidality was more common in people living with HIV/AIDS who were not receiving HIV treatment (nine studies; n = 95,575; RR = 2.9; 95% CI, 0.69 to 5.15) vs. patients who were on highly active antiretroviral therapy (seven studies; n = 14,610; RR = 2.6; 95% CI, 0.28 to 4.86). Limitations were mostly cross-sectional design studies and heterogeneity, including diverse samples and effect sizes.

A 2021 meta-analysis of 40 studies (12 cohort and 28 case-control studies) from 14 countries evaluated suicidality in people living with HIV/AIDS (n = 185,199).<sup>2</sup> This analysis reported on patients with advanced HIV disease (i.e., AIDS) and had minimal overlap with the previous systematic review.<sup>1,2</sup> The analysis included people of all ages and sexes diagnosed with HIV. Participants were 71% male, with a mean age of 41 years. The primary outcome was the incidence of death by suicide in people living with HIV/AIDS. The incidence of suicide attempts in people living with HIV/AIDS was 20 per 1,000 people (five studies; n = 38,210; 95% CI, 2.4 to 155 per 1,000 people). Studies showed that people living with HIV/AIDS had a significantly higher lifetime prevalence of suicide attempts (16%) compared

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## HELP DESK ANSWERS

with 3% in the general population (16 studies; n = 9,444; 158 per 1,000 people; 95% CI, 107 to 228).

Suicidal ideation was also higher in people living with HIV/AIDS compared with the general population (23% vs. 9%; 16 studies; n = 7,793; 228.3 per 1,000 people; 95% CI, 150.8 to 330.1).<sup>2</sup> The incidence of death from suicide among people living with HIV/AIDS was significantly higher than in the general population (10.2 per 1,000 people; 95% CI, 4.5 to 23.1 vs. 0.11 per 1,000 people). For every 10 percentage-point increase in the population living with AIDS compared with the general population, a 3.4% increase was found in suicide completion. Reporting and methodology were heterogeneous in the studies, and only

English-language databases were included, limiting the generalizability of this review.

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