





# Effectiveness of Psychological Interventions on People Living with HIV (PLWH): Representative Center, 20 Years Experience in Iran

Seyed Ahmad Seyed Alinaghi <sup>1,2</sup>, Pegah Mirzapour<sup>1,\*</sup>, Shayesteh Jahanfar <sup>3</sup>

<sup>1</sup> Iranian Research Center for HIV/AIDS, Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Tehran, Iran

<sup>2</sup> Research Development Center, Arash Women Hospital, Tehran University of Medical Sciences, Tehran, Iran

<sup>3</sup> Department of Public Health and Community Medicine, Tufts University School of Medicine, Boston, United States

\*Corresponding Author: Iranian Research Center for HIV/AIDS, Iranian Institute for Reduction of High-Risk Behaviors, Tehran University of Medical Sciences, Tehran, Iran. Email: [pegah.mirzapour@yahoo.com](mailto:pegah.mirzapour@yahoo.com)

Received: 20 December, 2025; Revised: 14 February, 2026; Accepted: 19 April, 2026

Keywords: HIV, AIDS, Psychological Interventions

Dear Editor,

Human immunodeficiency virus (HIV) is an interdisciplinary issue with biological, psychological, social, and spiritual aspects. One important aspect of this chronic disease is its psychological dimensions and the interventions needed to improve the mental state of people living with HIV (PLWH). Depression and anxiety are the most common mental disorders in PLWH, with a prevalence of about 80% among PLWH. Therefore, the prevalence of these two disorders in PLWH is about 3 to 5 times higher than in the general population, making psychological interventions for this group of patients essential (1).

In studies conducted at the Iranian Research Center for HIV/AIDS (IRCHA), various interventions have been used, including positive thinking, social support, mindfulness, social-cognitive interventions, Silva-based relaxation therapy, acceptance and commitment therapy (ACT), compassion-focused therapy, schema therapy, lifestyle and life skills modification, group therapy, narrative therapy, computerized cognitive rehabilitation therapy (CCRT), social marketing, neurofeedback, neuro-linguistic programming (NLP), aerobic exercise, and mobile applications for self-management, the majority of which employed randomized controlled or quasi-experimental designs. In these studies, each intervention had significant effectiveness compared with the control or no-intervention group. Also, there was a significant difference before and after each intervention, while there was no significant difference in the control group

before and after the study. No conclusions regarding the comparative superiority of specific psychological interventions can be drawn from the available studies. This summary is based on multiple published intervention studies conducted at the IRCHA, representing approximately two decades of clinical and research experience (2-9).

Another common disorder in PLWH is personality disorder. Borderline and antisocial personality disorders are more common among these people, and these disorders can make a person susceptible to HIV infection. In a way, people with these disorders are prone to unprotected risky sexual behaviors due to their impulsive characteristics, and their impulsivity has been examined in various studies, indicating a high prevalence of impulsivity among PLWH. Also, in various studies, the prevalence of personality disorders, especially borderline and antisocial types, has been high (10), which may complicate psychological care. However, evidence regarding the effectiveness of specific psychological interventions for personality disorders in this population remains limited. It seems that interventions such as schema therapy, compassion-focused therapy, mindfulness, or group therapy for these personality disorders among these people are somewhat effective (6).

Our two-decade experience at IRCHA, as an expert opinion based on long-term clinical experience, indicates that psychological interventions such as mindfulness, positive thinking, schema therapy, and group-based approaches consistently improve mental

health outcomes in PLWH, particularly in reducing depression and anxiety. Although no single intervention shows definitive superiority, tailoring strategies to individual psychological profiles, including co-occurring personality disorders, may enhance treatment outcomes.

## Acknowledgements

The authors acknowledge the use of artificial intelligence tools for assistance in English language editing.

## Footnotes

**Authors' Contribution:** The conception and design of the study: S. A. S. A.; Drafting the article: P. M. and Sh. J.; Revising it critically for important intellectual content: S. A. S. A. and P. M.; Final approval of the version to be submitted: S. A. S. A., P. M., and Sh. J.

**Conflict of Interests Statement:** The authors declare no conflict of interest.

**Funding/Support:** No funding was received.

## References

- SeyedAlinaghi S. [Prevalence of sexual disorders and their relationship with depression, anxiety, and stress in women living with HIV in Iran]. Project Report; 2024. FA.
- Ghayomzadeh M, Etesami MS, Earnest CP, Rezaei S, Navalta JW, Taj L, et al. Effect of a Short-term Lifestyle Modification Program on Quality of Life, Anthropometric Characteristics and CD4+T Cell Count of HIV Infected Patients in Tehran/Iran: A Randomized Controlled Trial. *Explore (NY)*. 2019;**15**(4):308-15. [PubMed ID: 30833130]. <https://doi.org/10.1016/j.explore.2019.01.004>.
- Ghayomzadeh M, Earnest CP, SeyedAlinaghi S, Wesson P, Taj L, Rezaei S, et al. Effects of Aerobic Dance Training on Psychological Well-Being and Immune Function of Women Living With HIV. *J Assoc Nurses AIDS Care*. 2019;**30**(2):238-44. [PubMed ID: 30822296]. <https://doi.org/10.1097/JNC.000000000000020>.
- Mehraeen E, Safdari R, SeyedAlinaghi S, Mohammadzadeh N. Exploring and Prioritization of Mobile-Based Self-Management Strategies for HIV Care. *Infect Disord Drug Targets*. 2019;**19**(3):288-96. [PubMed ID: 30345930]. <https://doi.org/10.2174/1871526518666181022113900>.
- Mirzapour P, Boosiraz A, Roozbahani MM, Fakhri B, SeyedAlinaghi S. Comparison of the Effectiveness of Mindfulness-based Cognitive Therapy and Silva-based Relaxation Therapy on Psychological Capital, Social Anxiety, and CD4(+) Count in People Living with HIV in Iran. *Curr HIV Res*. 2025;**23**(1):35-43. [PubMed ID: 39648423]. <https://doi.org/10.2174/011570162X321129241129040921>.
- Mostafa MS, Sedaghat M, Makvand Hoseini S, Seyed Alinaghi SA. The Effectiveness of Schema Therapy on Self-Concept and Social Health among People Living with HIV (PLWH). *Middle Eastern Journal of Disability Studies*. 2022;**12**(2).
- Amirkhani M, Ghorbanshiroudi S, Zarbakhsh Bahri M, Seyed Alinaghi SA. A Comparison of Effectiveness of Compassion-Focused Therapy (CFT) and Mindfulness-Based Stress Reduction (MBSR) on Psychological Flexibility of HIV Patients in Imam Khomeini Hospital. *Quarterly Journal of Management Strategies in Health System*. 2021. <https://doi.org/10.18502/mshsj.v6i2.7177>.
- Mirzapour P, Nikoogoftar M, Dadras O, SeyedAlinaghi S, Mohraz M, Pirnia B. Effectiveness of social marketing on reducing risky sexual behaviors in HIV-positive individuals in Iran: a pilot randomized controlled trial. *HIV & AIDS Review*. 2022;**21**(4):322-6. <https://doi.org/10.5114/hivar.2022.119811>.
- Mirzapour P, Zangeneh Motlagh F, SeyedAlinaghi S, Mehraeen E. Comparison of the Effectiveness of Positive Thinking Group Training and Acceptance and Commitment Therapy on Psychological Well-being and Risky Behaviors of Patients with HIV. *Journal of Iranian Medical Council*. 2022. <https://doi.org/10.18502/jimc.v4i4.8470>.
- Boosiraz A, Shahmohamadi E, SeyedAlinaghi SA. Personality Disorders in Patients with Human Immunodeficiency Virus. *Journal of Social Behavior and Community Health*. 2023. <https://doi.org/10.18502/jsbch.v7i1.12785>.