

Our study also indicated that current recreational drug users (n=43, 43.9%) had 3 times higher risk of persistent anxiety and/or depression even after the intervention of HIV-STAR compared to the non-users. Recreational drug use was prevalent among PLWHA [42], and illicit drug use and drug dependence were associated with psychiatric disorders [5]. In Taiwan, substance use disorders were associated with a 2.7-fold increase in the prevalence of depression in PLWHA and the use of club drugs has become a major problem nowadays [9]. Since both substance use disorders and mental health complications such as depression result in poor adherence and worsen the outcomes of HIV management [43], our findings not only confirmed the long-standing challenges in HIV care including mental health and substance use disorders, but also reinforced importance and necessity of a bundle-care module to address the challenges that should be incorporated into current HIV care.

Certain limitations were identified in our study. First, the sample size was relatively small and we only included HIV-infected patients from the inpatients setting, 40% of whom were admitted due to opportunistic infections. However, the sample size was similar to that of the Boston Depression Care study, and larger than that of the CBP study in Hong Kong, both were well accepted for their pioneer work on psychosocial interventions in PLWHA. Despite the potential selection bias, the opportunistic comorbidities appeared to aggravate anxiety and depression that rendered mental health care rather critical for this population. It was possible that the effectiveness of HIV-STAR for mental health improvement might reflect a better management of opportunistic infection and reinforce the importance of bundle-care. Another limitation was that the follow-up assessment was only performed before the discharge and only short-term effectiveness of HIV-STAR could be assessed. To address the long-term benefits of this bundle-care, we have also introduced some elements of HIV-STAR into a continuous care module that will be used for follow-up at the outpatient setting.

CONCLUSION

In conclusion, the high prevalence of mental health complications among PLWHA in Taiwan underscores the importance of integrated psychosocial care. While the HIV-STAR has provided an effective intervention to reduce anxiety and depression in general, more advanced psychosocial care bundles will be warranted to address specific risk factors for intervention-resistant anxiety and depression. Future clinical prospective studies are warranted to further address the benefit of integrated psychosocial care, especially in female sex, current recreational drug use, and risk group for HIV infection other than MSM.

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AUTHOR DISCLOSURE STATEMENT

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