



Bio and Psychological Consequences of Exercise on People Living with HIV in Iran: A Brief and Important Recommendation

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Dear Editor,

Humans have bio-psycho-socio-spiritual dimensions who need all of these levels in their living environment. People living with HIV (PLWH) also have all of the aforementioned measurements. One of the most important interventions that is effective on bio and psychological dimensions among PLWH is exercise interventions. Based on numerous research experiences at Iranian Research Center for HIV/AIDS (IRCHA), resistance exercise (RE) had a significant effect on PLWH so that RE increases muscle power and mass, and increases bone density among PLWH. RE also has a considerable effect on increasing the CD4 count in PLWH (1-5).

In addition to RE that are usually performed with Thera Band elastics in PLWH, aerobic exercise (AE) also has a remarkable effect on psychological well-being, increasing CD4 count, while it does not seem to have a significant effect on muscle power and mass (6). More importantly, combining RE and AE, in addition to significantly decreasing sarcopenia, increasing bone density, CD4 count, and brain-derived neurotrophic factor (BDNF) and improving anxiety and depression, has a meaningful consequence on reducing inflammatory cytokines such as interleukin-6 and TNF- α (1, 2, 7). Therefore, it is recommended that PLWH perform a combination of RE and AE to benefit from all of the bio and psychological factors.

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Footnotes

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