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Effect of Alcohol on Central Nervous System and HIV Infection: A Study on Dhankuts Living in District Bahraich of Uttar Pradesh, India

Alok Chantia and Preeti Misra

KEYWORDS HIV. Alcohol. Sexuality. Central Nervous System. Dhankut. Culture

ABSTRACT Human Immunodeficiency Virus (HIV) is endangering humanity. Many people at risk of or infected with the HIV are heavy drinkers. Both HIV infection and heavy alcohol use adversely affect the immune system and central nervous system (CNS) function. However, little research has addressed the effects of heavy alcohol use on the severity and progression of HIV disease, including the development of HIV associated CNS disease. Animal and in-vitro studies suggest that alcohol impairs various aspects of the immune system and increases the susceptibility to HIV infection, but may not accelerate progression of HIV disease. However, heavy alcohol use may interfere with the patient's adherence to antiretroviral treatment regimens. Neuropathological and neuropsychological studies have indicated that certain brain areas are affected by both HIV infection and chronic alcohol abuse. Magnetic resonance spectroscopy studies of both HIV positive and HIV negative people who were either heavy or light drinkers found that chronic alcohol abuse exacerbates some metabolic injury in the brains of HIV infected people, although this effect may be less pronounced in patients receiving effective antiretroviral therapy. Present study has been done on an endogamous group, Dhankut, living in Dhankuttypura of Bahraich district of Uttar Pradesh, India. The object of present paper is to see how alcohol impairs various aspects of the immune system and increases the susceptibility to HIV infection amongst this group. The paper also analyses the effects of heavy alcohol use on the severity and progression of HIV infection, including the development of HIV associated CNS disease with the help of various studies done on the subject.