Determinants of compliance with antiretroviral therapy in patients with human immunodeficiency virus: Prospective assessment with implications for enhancing compliance

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Abstract: Non-compliance with therapy is a significant problem, particularly when the disease process is chronic and therapeutic regimens are employed for prolonged periods. We assessed the prevalence and variables associated with compliance with antiretroviral therapy in patients with human immunodeficiency virus infection, by means of a longitudinal observational study of 46 patients aged 23 to 68 years, with human immunodeficiency virus infection, followed at the Pittsburgh VA Medical Center. Data on demographics, medical status, physical functioning (Karnofsky performance scores), CD4 lymphocyte count, depression (Beck depression inventory), coping (inventory of coping with illness scale scores), and psychological and emotional stress (profile of mood states scale scores), were prospectively assessed on all patients at baseline and every 6 months. Compliance was assessed at 6 and 12 months: patients taking ≥ 80% of antiretroviral therapy were considered compliant. Overall, 63% of patients were compliant with antiretroviral therapy. Age, education, employment, religious support, and perceived quality of life did not correlate with compliance. By univariate analysis, lack of prior intravenous drug use was significantly associated with compliance (p = 0.01). Compliant patients had significantly better adaptive coping (p = 0.03), and less depression (p = 0.04). By multivariate analysis, black race was significantly associated with non-compliance independent of intravenous drug use and educational status. History of prior opportunistic infection (which presumably heightens the perceived severity of illness) (p = 0.02), and lesser psychological disturbance scores (p = 0.02) were associated with compliance. Compliance was observed despite the greater number of prescription medications taken by compliant patients (p = 0.04). At 12 months, Karnofsky scores were better in compliant patients (p = 0.02), although mortality was not different. Besides identifying predictors of compliance, our data suggest that symptoms of depression and psychological stress be sought in patients with non-adherence.
References:

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