EVALUATION OF DIRECT COST INCURRED FOR THE MANAGEMENT OF ADVERSE DRUG REACTIONS (ADRs) TO HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART) IN HUMAN IMMUNODEFICIENCY VIRUS (HIV) POSITIVE PATIENTS

Adusumilli PK1, Parthasarathi G1, Mothi SN2, Sudheer AP2, Swamy VHT2

1JSSCollege of Pharmacy, Department of Pharmacy Practice, JSS University, Mysuru, India
2Asha Kirana Hospital for AIDS Care and ResearchCenter, Mysuru, India

OBJECTIVES: To study the direct cost incurred for the management and to explore the economic cost burden imposed by ADRs to HAART in Indian HIV/AIDS patients.

METHODOLOGY: A prospective observational study was conducted in HIV infected patients by clinical pharmacist in a HIV center for a period of 10 months. Patients of either sex who were on fixed dose drug combination of HAART were included in the study. Evaluation of actual direct cost to ADRs to HAART was based on cost of treatment, cost of hospital stay, consultation charges and cost of laboratory investigation.

RESULTS: A total of 380 HIV positive patients experienced at least one ADR to HAART among 1050 enrolled patients with incidence of 36%. A total of 440 ADRs were reported during the study period in which majority of the ADRs were due to Zidovudine + Lamivudine + Nevirapine (n = 211, 48%) followed by Stavudine + Lamivudine + Nevirapine (n = 53, 12%). The most observed ADRs were anemia (n = 153, 35%) and vomiting (n = 56, 13%) and rash (n = 39, 9%). A sum of 1,72,130 Indian Rupees (INR) was occurred in management of ADRs, in which majority of direct cost was towards medication to treat the ADRs 80,280 INR (46.5%) followed by hospitalization charges 46,500 INR (27%). Average cost incurred in treating the ADRs was found to be 390 INR.

CONCLUSION: The overall direct cost associated in treating ADRs to HAART was found to be higher and represent that ADRs to HAART increases the overall health care cost in management of HIV and reflects high economic burden to HIV patients. Hence clinicians and pharmacists should focus to prevent occurrence of ADRs to HAART thereby decreasing the ADR related costs.

Keywords: HAART, ADRs, HIV, Direct Cost