

Abstract

To find out the concentration of arsenic lead, and mercury through biological samples hair of male and female respondents. Hair samples from three different region in Punjab was collected from Volunteers and separately analyzed for quantification of Pb, As and Hg concentrations. The areas were selected to study the heavy metals concentration were Lahore, Sahiwal, Sheikhupura and Kasur. The analysis was performed using Atomic Absorption Spectroscopy Agilent Technologies Model 240AA and Vapor Generation Assembly of Agilent Technologies Model 77AA for Arsenic quantification. The study areas results were then compared according to Pakistan Environmental Quality Standard and World Health Organization. The study results show the higher to lower trend of metals as $Pb > As > Hg$. The analysis showed the higher results are possible due to anthropogenic activities.

KEYWORDS: Heavy metals, Atomic Absorption Spectroscopy, Respondents, Volunteer, Quantification