

Effects of Environmental Pollution on Human Health

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ABSTRACT

INTRODUCTION

Environmental studies and aspects are very much important as the environment is shared. Global effects on environment signifies the studies and work on green chemical approach now than ever before. Since human health is on direct risk due to environmental changes therefore research about such causes always the epicentre of researchers. This study deals with in-depth study and evaluation of direct effects of variety of metal exposure to human. This was managed by collecting number of human blood samples and questioner analysis along with water and soil samples. The results were analysed using different advance statistical techniques. Results analysis found that exposure of Pb, Mn cause neurotoxicity in the population. Whereas, fluoride and arsenic contamination cause the dental floris, dermatitis, melanosis, and keratosis. The chromium has carcinogenic effects on the humans. The results were evaluated using Piper plot, PCA, and other statistical operations.

MATERIAL AND METHODS

Sampling was performed using random sampling method. The physicochemical parameters were tested using standard STM protocols. Different health parameters were calculated using reported methods. Analysis were performed using ICP-MS, ion selective electrodes, flame photometer, pH meter, conductometer, spectrophotometer.

RESULTS AND DISCUSSION

The water distribution can be observed from the following figure 1

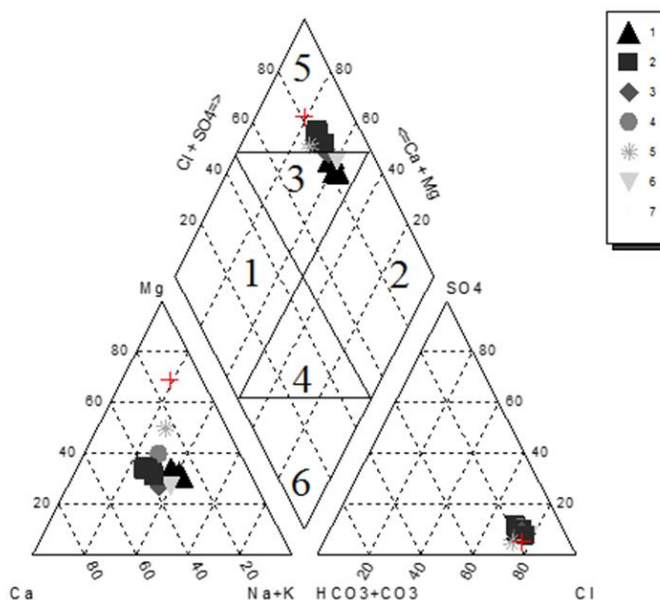


Figure 1. Piper plot giving water distribution according to their different types.

Water distribution on the basis of different parameters can be observed from given PCA plots.

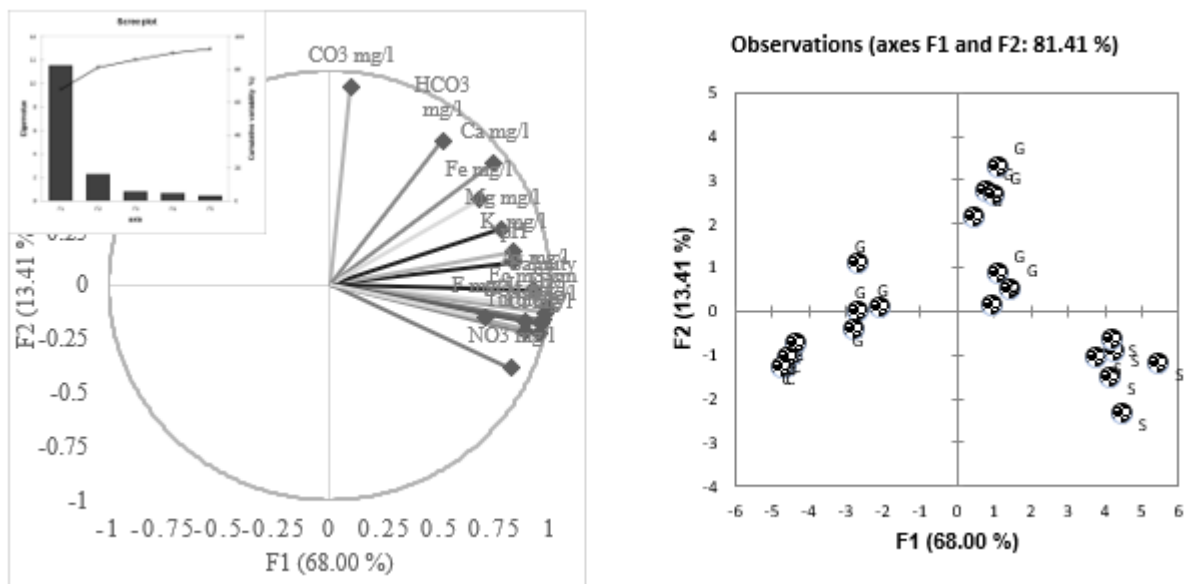


Figure 2. PCA plots (a) As and F Score plot for different water parameters. (b) showing clustering and distribution.

CONCLUSION

Different areas of Pakistan where mines of different metals are present are highly at risk for the human health. The water and soil present there is highly unhealthy for that area population. The similar contamination was observed in their blood which is evident that the population is suffering from the metal contamination.

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