

Impact of Artisanal Gold Mining in Nigeria: Implication for Children's Health

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Introduction

In 2010, there was an outbreak of lead poisoning in Zamfara state, Northwest Nigeria and that of Anka Local Government was prominent (Getso *et al.*, 2014). Just in one day about 600 children were reported dead (Grossman, 2012). This study determined the impact of mining activities in Anka area, Northwest Nigeria vis-à-vis heavy metal distribution in groundwater, surface-water, mine-water, soils, stream sediments, rocks, mine tailings, children hair and nails. All samples were analysed for major and trace metals using best international methods and were analysed using Agilent ICP-MS at the State Key Laboratory of Environmental Geochemistry (SKLEG), Guiyang, China.

Discussion of Results

It was deduced from this study that geological media in this area are highly concentrated in heavy metals which might have been leached out of rocks and tailings during uncontrolled mineral exploitation and processing. It was further revealed that these metals especially Pb and Zn bio-accumulate in boys and girls between ages 5 and 8 mostly from inhalation, ingestion and direct dermal contact with particles from the mines which are transported mainly by air and surface water. These metals when present in excess in children bodies can lead to diseases such as memory loss and eventually death. We concluded that there is an urgent need for Government of Nigeria and other international organizations to collaborate and carry out health awareness in areas where artisanal gold mining is being carried out in the country.

References

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