

ASSESSMENT OF OCCUPATIONAL HEALTH HAZARDS ASSOCIATED WITH TIN MINING IN JOS, PLATEAU STATE, NIGERIA

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ABSTRACT

The vision to diversify Nigerian economy has opened the door for more mining activities in nearly all the states of the Federation without appropriate occupational and safety regulation, policies and laws leading to over exploitation of the environment with attended health and environmental challenges. In 2015, a study was carried out to assess the occupational health hazards in some parts of Plateau State, Nigeria. The objective of the study was to identify common occupational hazards in tin mining activities in Jos. Descriptive cross-sectional design was used in the study. A total of 200 miners that gave their verbal consent were used for the study. The instrument for data collection were guided questionnaire, physical medical examination and walk through inspection. Data were analyzed using descriptive Statistics. The result showed that the common hazards associated with tin mining were noise, extreme temperature, tin dust and heavy lifting. The common health problems spotted were skin rashes, malaria, joint and muscle pains, respiratory diseases and headache. Heavy lifting was more on the female 59 (54.1%) than male 50 (45.9%) and a chi-square test for heavy lifting was 10.99 ($p < 0.001$) indicating high significant difference. Female-adult miners (56.7%) had the highest number of malaria prevalence than female-child miners (43.3%) while adult-male miners (90.0%) had more skin rashes than male-child (10.0%). The variations of temperature were recorded as 19 - 21°C in the morning; 31 - 32°C in the afternoon and evenings. The noise level ranged between 67 and 73 dB in all the sites. The result also showed that land degradation was high with 83 (41.5%). In conclusion there is an urgent need for proper regulation and monitoring of mining activities in Jos and other parts of Nigeria to mitigate the obnoxious health and environmental consequences associated with mining. Finally, there is need to review the main Health and Safety legislation in the country (i.e. the factories Act, Cap. 126 LFN 1990) to include major stakeholders in the industry such as Ministries of Labour and Productivity, Environment, Health, Information, Mineral Resources, Women Affairs etc.

Key Words: