OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT IN SMALL - SCALE MINING: FOCUS ON FEMALE WORKERS IN GHANA

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ABSTRACT

The awareness and implementation of occupational health and safety practices are generally poor in most developing countries. Although studies show there are increasing education and awareness of health and safety worldwide, numerous occupational health and safety concerns persist in most African countries, particularly in Ghana. This study aims to unearth women's involvement in small-scale mining and their prevailing occupational health and safety conditions.
Problems associated with the nervous, digestive system, immune systems, skin, eyes have been identified among female workers as a result of the chemicals used in gold processing. Exposure to prolonged periods of airborne contaminants leads to permanent lung diseases. The laborious nature of this activity also takes a catastrophic drain on the health of these female workers. The danger of falling into unguarded water pits and drowning cannot be left out.

With these challenges outlined above, it has been demonstrated that insufficient focus on occupational health and safety practices particularly among females in small scale mining continues to exist which calls for the implementation of national restructuring of policies that pertains to occupational health and safety of women in small scale mining. In future, alternative and viable forms of employment with minimal risk should be considered.

Keywords: *Women, Diseases, Small-scale mining, Occupational Health and Safety, Ghana*

INTRODUCTION

"I dropped out of school in elementary class five (5) when my father died because my mother who was suffering from chronic chest and back pains did not have enough money to help me continue with my education. The only source of livelihood for me is to be carrying the unrefined gold rocks for money, I will quit when I have saved enough money to learn a trade" this was from a 22year old lady "A" who works at a small-scale mining site in Esuoso. "I know there are dangers associated with this work as a laborer. Some of my friends have sustained serious injuries as a result of this work but I can't stop now. I never stepped foot in a classroom so I don't know what to do with my life if I don't do this kind of work to survive" from thirty-eight (38) year old mother of three (3) mine worker. These and many more are some of the similar stories and experiences shared by most of these female small-scale workers across the nation.

Small-scale mining is usually considered illegal and an informal activity mostly left to the illiterates in the society. However, as a result of the economic benefits derived from this sector, some developing countries like Ghana, Philippines, Mali and Papua New Guinea have attempted to streamline the activities of this sector into the formal sector. While some countries have succeed in this pursuit, other countries are still struggling and is even deemed

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illegal punishable by law when caught. This sector is usually characterized by utilizing simple tools, inadequate technology, labor intensive, employing unskilled or semi-skilled labor and performed under hazardous conditions.

Although exact numbers that pertains to accidents or fatalities relating to small-scale mining remains inconclusive, the International Labour Office (ILO 1999) report stated that the activities of small-scale mining was fast expanding in many developing countries and were often engaging more female and children in their operations but sadly, little or no considerations were paid to the occupational health and safety of these workers. As a result, the fatality rate is expected to rise sharply by ninety times as compared to mines in developed countries. The report further found that the number of developing countries venturing into small scale mining activity has increased tremendously which is even expected to rise further as the years go by. For the rural folks of about 80 -100million people worldwide, this is a welcomed cash earner activity to sustain them and their household.

The significant contributions made by small-scale mining to the socio-economic sector of the Ghanaian economy cannot be overemphasized. Over the years, the operations adopted in small scale mining is slowly shifting from the usual conventional methods involving less technology to the use of more sophisticated mining techniques and technology. The government in its quest to streamline the activities of small scale mining implemented the Small Scale Gold Mining Law of 1989 aimed at regulating the operations of these small scale miners. Little successes have been recorded as the vast number of illegal scale miners persist whose operations continue to significantly affect the environment, endangering lives and posing security threats. The effects of small scale mining which include pollution of existing water bodies, sinkholes, deforestation, erosion, loss of existing biodiversity, soil contamination, etc do not only affect the community where this activity is performed but also extends to other communities or locations. For example, a freshwater body such as a river upstream which has been used for washing crushed gold ores carries this debris and pollutants from these origins to lower downstream releasing its havoc to the communities down below. Since the activities of these small scale miners are labor-intensive, one could be tempted to conclude that few women will be found in this sector but that is not the case from recent studies (Lu 2012). The youth especially women are preferred than in large industrial mining because they provide a cheap source of labor. Most of the chemicals used in the processing process of gold are very harmful and sometimes lethal if not handled with care. Mercury, arsenic or cyanide used in the processing of gold is considered by W.H.O as one of the top dangerous chemicals of major health concern. Exposures to even small quantities have disastrous consequences on people especially women because of their special role in reproduction. Some of these effects include a threat to the development of the unborn child as a result of gene mutation leading to deformities (Sanders et al. 2015) and has toxic effects on the nervous, digestive system, immune systems, skin and eyes. Exposure to prolonged periods of airborne contaminants such as rock dust by these women workers will eventually lead to permanent lung diseases such as silicosis. Research has shown that these chemicals get passed from lactating mothers to their babies through breast milk which greatly endangers the child's health and future development. The laborious nature of this activity also takes a catastrophic drain on the health of the female in this field as she has to work long hours in this hostile environment which further saps her health. Countless reports have also been documented of female miners getting seriously injured or maimed as a result of falling rocks, falling into unguarded water pits and injuring themselves or drowning in the process.

The communities under study are located in the middle belt of Ghana characterized by high rainfall and lavish vegetation. The inhabitants are predominately farmers who cultivate cash crops and rare livestock. Since the discovery of gold in the area a lot of the inhabitants

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especially the youth are venturing more into small scale mining leaving the farming activities to the older population.

This study aimed to unearths women's involvement in small-scale mining, and also ascertain their occupational safety and health conditions

METHODOLOGY

The study was carried out in three (3) rural communities namely Aboaso, Esuoso and Ekoun all in the Tarkwa Nsuaem Municipal Assembly in the Republic of Ghana. It was a descriptive study to assess the state of occupational health safety among small scale miners with special focus on women relying on collected data and available secondary data such as data from local organizations involved in occupational safety of small scale mining. The study population was made up of all the women that were engaged in any form of mining activity in these three communities. For our study, the estimated total number of small scale female workers was 92 out of which 84 agreed to participate. To help us in gathering the required data for our study, a semi-structured interwiew questionnaire was used to gather reliable quantitative data. Female respondents above the age of 18 years who have been involved in mining activities for a minimum of six (6) months were considered eligible to partake in this research. Those that were below the age of 18 years were excluded from the study.

RESULTS AND DISCUSSION

The study was to discover and better comprehend the main issues affecting occupational health and safety practices among female workers in small scale mining in Ghana West Africa.

Eighty – Four (84) female respondents above the age of 18years in three (3) rural communities were interviewed in this study. 61 respondents representing more than two thirds of the respondents were between 18-30 years of age (72.627%) while 23 respondents representing 27.38% were above 30 years. 64 respondents representing 76.19% were single while 20 respondents representing 23.81% were married. 30 respondents had no formal education representing (35.71%). Those with primary education were 35 representing (41.67%), while the respondents who had secondary were 19 (22.62%) with none having tertiary education. Respondents on the sites were divided into categories of laborers (carrying and washing), supervisors (directing work on site), machine operators, diggers and lapidary. None of the female respondents were found to be a machine operator or digger representing 0%. 80 respondents representing 95.24% were employed as laborers; representing 2.35% were supervisors while 2 respondents representing 2.35% were lapidary. Various health challenges were reported among these respondents. Out of the 84 respondents 31 respondents representing 36.90% had constant mild to severe headaches, 20 respondents representing 23.81% had back and joint pains, 26 respondents representing 30.95% were experiencing chronic cough while the remaining 7 respondents representing 8.33% had one skin disorder or the other. Physical injuries such as cuts, bruises, lacerations, fracture were found to have occurred in more than half of the respondents 56 respondents representing 66.67% respondents. No fatality was recorded although near misses were common.

A total of 78 (92.86%) respondents did not make use of protective measures such as wearing gloves, overall, safety boots, goggles or helmet. The level of education of the respondents who did not implement any protective measures were 50, 21 and 7 representing 64.10%, 26.92% and 8.97% for no formal education, primary education and secondary education respectively. 6 respondents were found to have taken some protective measures.

Although extensive research on occupational health and safety exit worldwide, there is still inadequate and very limited research attention to occupational health and safety occupational

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health and safety in the small scale mining sector of Ghana particularly to female workers in small scale mining. The review went further to expose the lapses in our occupational health and safety of female workers in this sector.

Efforts are been made by the government to implement occupational health and safety practices in its developmental agenda but several lapses and bottlenecks have made its implementation difficult. Such challenges were outlined to include inadequate occupational health and safety infrastructures and occupational health safety measures (Ghana Health Service, 2007; Ministry of Health Report, 2007), the absence of comprehensive national occupational health and safety policy (Clark, 2005; Muchiri, 2003); inadequate assistance from the employers, employees, and government (Puplumpo, 2012) lack of knowledge and illiteracy (Ghana Ministry of Health Report, 2007). These challenges therefore make the adherence and implementation of occupational health and safety practices challenging. Other national and international developmental partners and agencies must help with streamlining occupational health and safety practices in Ghana since a sound and healthy worker is productive worker.

CONCLUSION

For a country to achieve great strides in its productivity and socio-economic capacity, the occupational health and well-being of its workers should be of outmost importance (WHO, 1994). All over the world and with Ghana being no exception, small-scale mining is regarded an essential contributor to the social and economic well-being of many poor folks in rural or developing communities. Based on earlier researches, it is found that women in small-scale mining are at greater risk of numerous hazards that need prompt attention.

Many of these women were illiterates who lack proper formal education and training on safe work practices. They were ignorant about the dangers of these harmful chemicals used in the mining process and its repercussions on their health as a whole. There is therefore, the need for proper monitoring, surveillance, evaluation and regulation at both the local and national governance level. Therefore the vulnerability of women in the mining sector needs prompt attention by addressing the challenges in the areas of occupational safety and health as well as in the implementation of feasible work opportunities for the women in small-scale mining.

Human rights and human dignity is a prerequisite for socio-economic development and should therefore be promoted. Since the right to good health and safety is the right of all, occupational health and safety should be given the needed social, legal and moral attention in the country.

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