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ACCESS TO INFORMATION ON LEAD POISONING IN ANKA LOCAL GOVERNMENT IN ZAMFARA STATE

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ABSTRACT: Lead poisoning is a global problem in the 21st Century. It cause permanent brain damage, kidney disease, nephropathy, seizure, coma and even death in some cases (Mousa, 2015). Lead exposure accounted for 494,550 deaths and loss of 9.3 million disabilityadjusted life each year (Institute for Health Metrics and Evaluation (IHME), 2015). The highest burden is in low and middle-income countries. IHME also estimated that lead exposure accounted for 12.4% of the global burden of idiopathic developmental intellectual disability, 2.5% of the global burden of ischemic heart disease and 2.4% of the global burden of stroke. Exposure to lead contaminated soil and dust resulting from mining has caused mass lead poisoning and multiple deaths of people in Nigeria, Senegal and other countries (WHO, 2017). The problem is more prevalent in Zamfara state especially in Bagega of Anka local Government Area where hundreds of lives are lost on annual basis. Bagega and its environs are part of the region where active artisanal gold mining is being carried out in Zamfara State, Nigeria. Thus, the poisoning outbreak is very severe in the region. During the period of lead poisoning outbreak, a joint research was conducted by Médecins Sans Frontières (MSF), US Center for Disease Control and Prevention (CDC), Blacksmith Institute (BI) and World Health Organisation (WHO). It was revealed that out of about 120 children examined, 96% were found to show life threatening Pb concentrations in their blood (Galadima, 2012).

KEYWORDS: information, lead poisoning, Anka Local Government, Zamfara State

INTRODUCTION

Scholars have viewed lead poisoning from different perspectives. For instance, human reproduction, lead is known to cause a number of adverse outcomes in both men and women. In addition to causing infertility in both sexes, effect of lead exposure in women include miscarriage, premature membrane rupture, pre-eclampsia, pregnancy hypertension, and premature delivery (Winder, 1992). Indeed, Troesken (2006) reports stories of still births and high rates of infant mortality related to lead-poisoned mothers in the UK in the early years of the Industrial Revolution. In a population study of DC neighborhoods exposed to high levels of lead in the water due to leeching lead pipes, Edwards (2013) finds that areas with high water lead levels see birth rates decrease and fetal death rates increase. From the perspective of infant health and child development, lead impairs cognitive and non-cognitive ability at levels as low as $1-2\mu g/dL$, 80 times lower than the level of concern for iron (DNTP, 2012). Lanphearet increase from 2.4 to $10\mu g/dL$, with lower IQ decrements associated with further BLLs

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increases. Small children are especially exposed to lead-contaminated dust from paint and windowsills due to normal hand-to-mouth activity, and they might grow accustomed to the sweet taste of lead paint (Fee, 1990). Moreover, lead is most damaging to small children: they absorb and retain more lead than adults, and their neurological development is particularly susceptible to neurotoxins (McCabe, 1979). Despite the position of these scholars, the problem still persists, therefore to reduce the problem of lead poisoning to the barest minimum, there is need to view it from a different perspective. None of the studies viewed lead poisoning from information perspective. This study is unique because it explore lead poisoning from information perspective.

World Health Organization (WHO) has made available through its website a range of information on lead poisoning. Including information for policy makers, technical guidelines and advocacy materials. WHO is currently developing guidelines on the prevention and management of lead poisoning, which will provide policy-makers, public health authorities and health professionals with evidence-based guidance on the measures that they can take to protect the health of children and adults from lead exposure. The elimination of lead will contribute to the achievement of Sustainable Development Goal (SDGs) by 2020, achieve the environmentally sound throughout their life cycle, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment. Despite the information provided by Governmental and non-governmental organizations, the problem of lead poisoning still persists in the area. There are many unsafe practices that would expose adults, children, and animals to harmful levels of lead. Since most villagers did not wear personal proactive equipment while working with the gold ore, they would return home from the mines with lead dust on their clothing. Mortality rate and serious morbidity among populace increases on daily basis. Exposure of pregnant women to lead causes miscarriage, stillbirth, premature birth, and low birth weight, as well as minor malformations. General insecurity in the area because of the absence of security personnel in most of the mines field. People not empowered enough to disengage from illegal mining despite the health implication on the people. Plants grown on contaminated soils and children inhaling lead dust on daily basis. Moreover, many villagers would bring rocks inside their homes to extract the gold. These rocks contained lead, and when the gold was extracted, lead dust would be released and spread throughout the house. Children often helped to grind the gold ore exposing them to high levels of lead dust.

Research Questions

To achieve the objectives of this study, the following research questions were raised:

1. What type of information on lead poisoning is available for lead poisoning victims in Bagega, Zamfara State?

2. How do lead poisoning victims access information on lead poisoning in Bagega, Zamfara State?

Research Design

This study considers case study approach as appropriate because its aim is to understand human beings in a social context by interpreting their actions as a single group. Furthermore, the study involved only one community (Bagega) and Members were the group of people (unit of analysis) that was examined. Six (6) study participants were purposively selected for the study because saturation was attained at that point. An in-depth interview was utilized as the instrument for data collection where the moderator and the assistant moderator collected data

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from the study participants in their setting (Bagega). The data collected was analysed in the following sequence: transcription and translation of raw data – coding - categorization of unprocessed data - presentation and discussion of the data.

Data analysis and presentation

The recorded voices from the participant were transcribed and each of the responses from the eight (8) participant was read, examined and re-examined using an analytical inductive process described by (Creswell, 2013). That "researcher works back and forth between themes and databases until the researchers has established a comprehensive set of themes". As a result, while reading the transcribed interviews, the researcher highlighted words, phrases, sentences that best describe the respondent's actions, thoughts and understanding of access to information on lead poisoning.

Type of information on lead poisoning is available for lead poisoning victims in Bagega, Zamfara State

Information on temperature Rise: some of the respondents believed that lead poison information on temperature rise is not available to parents in Bagega community so, whenever a child temperature rises the parent are left I dilemma and he/she is rushed to the hospital for verification.

"Initially what I know about temperature rise is ordinary fever with further signs of convulsion. The children get infected when the miners return with their working cloths and embrace and hug their children before putting the cloths off. Mothers in the community should also be blamed for allowing crawling babies to be embraced by fathers (miner) who wore their site cloths. The children touch gold and use the same hand for eating without proper rinsing".

Information on Convulsion: some of the respondents believed that information on convulsion is not readily available in Bagega community, because whenever a child start convulsion that child is immediately rushed to the hospital for test and diagnosis. They view it as infection but not really associated to lead poison.

"According to what we are told, children are infected when they went to the mining cite. If the poison is inhaled, a child start convulsion then the child is infected by lead.

Information on Community's Sand: some of the respondents believed that information on the community's sand is readily available because they know that there land was contaminated with lead. The sand was once cleared/buried that is hide underground new one was spread.

"The whole community sand was cleared and new one was replaced because the whole community sand was contaminated with lead poison."

Information On Weak Several Parts Of The Body: some of the respondents believe that information on how led poison weak several parts of the body is readily available because some of the victims are blind, deaf, mental disorder among others and they all know that it was as a result of the poison.

"Lead poison weak several parts of the body, it is contacted while eating food that is not covered or not washing of hands before eating without knowing what you are taking in to your stomach. It can also be contacted when sleeping place is not properly taking care of. Also, when mining equipment are not stored in a safe place"

Information on Rid: from the response gotten from a respondent on information available on lead poisoning in Bagega. The respondent revealed that they did not know anything about lead

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poisoning but he want the community to be free from the poison. "The only information I have is for us to be free from it. I don't know anything about it"

Information on Dust Inhaling: some of the respondents believed that information on dust inhaling is available in the community. Because when a child breathe in dust from the mining site, that child can quickly be infected with the poison.

"Lead poisoning is something dig from the bush that is together with gold, the lead poison and the gold are together. It is caused by inhaling the dust that has gold"

Information on Artisanal Mining: some of the community members revealed that mining practiced by individuals which is informally (illegal) panning for gold using their own resources is information available on lead poison in Bagega. Because majority of the community members are engaged in such mining activity which as a result lead to the community destruction.

"It is caused by inhaling the dust that has gold. This was as a result when children keep dying the cause was unknown until when the foreigners understand that the people of the community are engaged in artisanal method of mining"

Access to information on lead poisoning in Bagega, Anka Local Government Area, Zamfara State.

Doctors without Borders (Medecins Sans Frontieres): majority of the respondents believed that their main source of information on lead poisoning is from doctors without borders. Which is an international, independent medical organization. They provide medical assistance to people affected by conflict, epidemics, disasters, or exclusion from healthcare. The teams are made up of tens of thousands of health professionals, logistic and administrative staff-bound together by their charter. Their actions are guided by medical ethics and the principles of impartiality, independence and neutrally. They are non-profit, self-governed, member-based organization. MSF was founded in 1971 in Paris by a group of journalists and doctors. Today, they are a worldwide movement of more than 42,000 people. MSF is a central player in treating lead poisoning in Zamfara state, and is responding to the acute phase of this emergency. MSF has for the moment controlled mortality, but patients with lead poisoning will require significant long-term treatment and follow-up. Therefore, the people in the community are very satisfied with the information gotten from them.

"We used to hear about it before it reached this village, Infected child died within 20mins till when DOCTORS WITHOUT BOARDERS came and take action by taking blood samples and they immediate identify the children that are being infected. The poison can attack a child through bone, bone marrow, and sometimes blood. When care is not taking it touches the brain the villagers will assume it is Jinn's which is not. But, as for now they don't have that believe, infected child is taken to Anka for treatment because of security insurgence"

Radio: some of the respondents revealed there source of information on lead poisoning is through radio.

"On the radio they give information on prevention"

Community members: from the response gotten from some respondents, they revealed that their source of information on lead poisoning is from other community members.

"When it occurred they take action on the miners to avoid coming into the community with things they used at the mining cite. They also clear all the dirt's inside the community so as to

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replace the community's sand with a new one. And, any miner caught with his working things at home will be dealt with."

CONCLUSION

It has been concluded that Bagega community members find it difficult to access information on lead poisoning. Respondents who perceived difficulty in using information on lead poisoning stands the risk of having miscarriage among women and animals, child mortality, convulsion, blindness, deafness, mental disorder when the poison touches the brain, weakness of several parts of the body, children with stunted growth and the worst having dead children which all these was caused by artisanal method of mining.

Recommendation

1. Community, cultural and religious leaders should be provided with adequate information on prevention and cure of issues related to lead poisoning in Bagega community, Zamfara State. 2. Lead poisoning information should also be provided through social networking sites like watsapp, facebook and Instagram since the inhabitant uses smart phone to subscribe to such services.

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