

PERCEIVED IMPACT OF ENVIRONMENT HEALTH HAZARDS ON THE PEOPLE OF ATAN-ObA COMMUNITY IN OFFA, KWARA STATE

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Abstract

This study was conducted to determine the perception of impact of environmental health hazards in Atan-Oba Community in Offa, Kwara State, Nigeria. Atan-Oba region is known to be overcrowded with poor or inadequate sanitation. Two hundred (200) respondents were randomly selected using simple random sampling technique for the research. Descriptive survey design was used with questionnaire as research tools to elicit information from the respondents.

The data collected were analyzed using both descriptive and inferential statistics with the aid of SPSS 17.0. Results indicated significant relationship between the well-being of people and hazards of environmental pollution (r -value=.027, p .006), significant relationship between causes of environmental health hazard and people's health (r = -.170, p = .018).

Findings from this study indicated that the well-being of people of Atan Oba community were significantly influenced by the high environmental pollution and causes or sources of the pollution.

The study recommends that government at all levels should provide effective legislation to ensure compliance with environmental sanitation at community level, environmental sanitation should be carried out at least once in a month and health care providers should give proper enlightenment campaign on the importance of sanitation and its negative effects on the people's health.

Key words: Perception, Impact, Environment, Hazard.

Introduction

Atan-Oba is a large street along Offa Local Government secretarial comprising of about 10,000 people living on the street. The refuse/sewage disposal of the area is very poor and hazardous to the people living in the street and even to those who are close to the street. People dump refuse in open spaces and these refuse that are poorly disposed are being blown about by the wind thereby causing the environment untidy and also pollute the source of water supply. The improperly disposed waste also caused a lot of accident through cuts and puncture wounds from sharp objects among the people of Atan-Oba community. While burn tyres pollutes the air that people breathe in. Some who do not have toilets attached to their houses even dump sewage along the street which pose a great threat to the health of the people living of the community.

Environmental hazard can be defined as the state of events which has the potential to threaten the surrounding's natural environment and adversely affects people's health. An environmental hazard is also any substance, agent, equipment, object, human behaviour or factor that is capable of injury, disability, disease or death in humans or has the potential for polluting or degrading the environment (Olaniran et al., 2008).

Every living thing depends on the environment for such basic necessities as shelter, air, water and food. The simple definition of environment is land, water and air. Lack of cultural education is the bane for some of problems in today's

contemporary world. Cultural education emphasizes the keeping of one's place clean and removes waste and not throwing and dumping refuse on the dump into the path flow of surface runoff water. The human environment is considered as comprising those physical, chemical, biological and social influences that have a significance and detectable effect on the health and wellbeing of the individual or communities (Agbu, 20.08).

The World Health Organization (WHO) has been actively concerned with environmental factors and their effects on human health. This concern is largely based on the fact that poor sanitary conditions and the accompanying communicable diseases are the greatest causes of morbidity and mortality in developing countries where the majority of world's population lives. Such conditions are characterized by water supply that are inadequate in quality and quantity, poor or non-existence waste disposal system and insufficient health education.

Millions of people die as a result of diseases associated with environmental pollution, over 2million people die from malaria at any given time (WHO, 2011). All these preventable disease occurs because of our inability to create and maintain clean environment. Every year, more than 5million infants and children die from diarrhoea diseases primarily due to contaminated food and water. It has become increasingly clear that in recent years that environmental degradation if allowed or unchecked could result in serious and sometime irreversible damage to life (WHO/ UNEP 2004).

Environment is so important that it influences the behaviour and development of living thing. The environment that is unpolluted, clean and not degraded would not harbour pollutants that endanger lives. Negligence or carelessness and ignorance are the factors that govern the causes of environmental hazards. During fire outbreak, a lot of problems are encountered in saving lives and properties, facilities are not always available when fire outbreak occurs. Based on the associated hazards to polluted environment, the researcher therefore decided to investigate the perception of environmental hazards impact in Atan-oba community and suggest some measures that could be taken to curb environmental hazards.

Statement of the Problem

Environment is so important that it influences the behaviour and development of living things. The environment that is unpolluted, clean and not degraded would not harbour pollutants that endanger lives. Also, it is paramount to make mention that negligence or carelessness and ignorance are the factors that govern the Atan-Oba community is located along Offa Local Government secretarial with a population of not less than 10,000 residents. The refuse/sewage disposal on the stress in the community is very poor and could be hazardous to the people living in

the area. Residents dump refuses in open spaces and these refuse are blown about by the wind thereby making the environment untidy and also pollute the source of water supply and often results into cuts and puncture wounds from the sharp objects.

Based on the associated hazards to polluted environment, the researcher therefore decided to investigate the impact of environmental health hazards in Atan-Oba Community in Offa and suggest some measures that could be taken to curb environmental hazards.

Research Questions

1. What are the causes of possible environmental health hazards in Atan-Oba as perceived by the people of the community?
2. What are the impacts environmental health hazards on peoples' health in Atan-Oba?
3. What are the preventive measures against environmental health hazards in Atan-Oba Community?
4. Are there any relationship between residents' perception of environmental health hazards and their health risk status

Methodology

The descriptive survey design method was adopted for this study. Atan-Oba area has a total population of Ten Thousand (10,000) residents in the area. Simple random selections of 200 respondents from the ten thousand residents in the area were chosen to complete the questionnaire. The study period lasted for twelve (12) weeks four month. Sample size calculation not was done using the Fisher's Method Formula with 5% error and .05 accuracy level. A self-structured questionnaire covering description of environmental health hazards, causes of environmental health hazards, impacts of environmental health hazards and prevention of environmental health hazards in Atan-Oba was used to elicit responses from the respondents with adopted and modified three-point Likert Scale type of response for data collection. The data were analyzed using the descriptive statistical as well as inferential statistics of Pearson's Product Moment Correlation at 0.05 level of significance.

Results

Table 1: The response on relationship of well-being and the environmental health hazards in Atan-Oba

S/ No	Statements	Strongly Agreed (SA)	Agreed (A)	Disagreed (D)	Strongly Disagreed (SD)	Unde- cided (U).
1.	Pollution from hazardous environment can affect peoples' well-being.	51(25.5%)	136(68%)	7(3.5%)	6(3%)	0(0%)
2.	Filthy environment can cause diarrhoea.	126(63%)	41(20.5%)	13(6.5%)	19(9.5%)	0(0%)
3.	A community level of education can determine their well-being.	141 (70.5%)	25(17.5%)	11(5.5%)	9(4.5%)	0(0%)

Table 1 showed that majority of the respondents 136 (68%) agreed that pollution from hazardous environment and peoples' well-being has a close relationship. Most of the respondents (63%) strongly agreed that filthy environment can cause diarrhoea. One hundred and forty one (70.5%) of the respondents strongly agreed that higher level of education of the community determines their well-being.

Table 2: Causes of environmental health hazards.

S/ No	Statements.	Strongly Agreed (SA)	Agreed (A)	Disagreed (D)	Strongly Disagreed (SD)	Unde- cided (U).
1.	Lack of drainage can cause environmental health hazards.	67(33.5%)	49(24.5%)	80(40%)	4(2%)	0(0%)
2.	Inappropriate location of refuse depot in strategic places in the community can cause environmental health hazards	13(6.5%)	18(9%)	68(34%)	101(50.5%)	0(0%)

Table 2 above showed that majority 80(40%) of the respondents disagreed that lack of drainage Lack of drainage can cause environmental health, hazards. Majority 101(50.5%) of the respondents stated that Inappropriate location of refuse depot in strategic places in the community can cause environmental health hazards, 141 (70.5%) of the respondents strongly agreed that not many incinerators are built by the community.

Table 3: Impacts of environmental health hazards in Atan-Oba community.

S/No.	Responses	Strongly Agreed (SA)	Agreed (A)	Disagreed P»	Strongly Dis-agreed (SD)	Undecided (U).
1.	Uncontrolled environmental health hazards have negative impacts on people's health.	67(33.5%)	89(44.5%)	11(5.5%)	33(5.5%)	0(0%)
2.	Vomiting and diarrhoea are possible impacts of environmental hazard on people's health.	126(63%)	41(20.5%)	13(6.5%)	19(9.5%)	0(0%)
3.	Ineffective drainage system can constitutes air-borne diseases.	67(33.5%)	49(24.5%)	80(40%)	4(2%)	0(0%)
4.	Inappropriate waste disposal can contaminate sources of water in the community.	105 (52.5%)	75(37.5%)	9(4.5%)	11(5.5%)	0(0%)

Table 3 showed the opinion of respondents on the impacts of environmental health hazards in Atan-Oba. One hundred and twenty-six (63%) respondents reported that vomiting and diarrhoea are possible impacts of environmental hazard on people's health. Sixty-seven (33.5%) respondents strongly agreed Ineffective

drainage system can constitutes air-borne diseases.

Table 4: Preventive measures against environmental health hazards in Atan-Oba Community.

S/ No.	Responses	Strongly Agreed (SA)	Agreed (A)	Dis- agreed (D)	Strongly Dis- agreed (SD)	Unde- cided (U).
1.	Location of industries far away from residential areas.	141(70.5%)	7(3.5%)	32(16%)	20(10%)	0(0%)
2.	Periodic medical check-up for food vendors.	79(39.5%)	98(49.5%)	10(5%)	13(6.5%)	0(0%)
3.	Regular inspection of house in the community by environmental officials.	61(30.5%)	136(68%)	2(1%)	1(0.5%)	0(0%)
4.	Pro vision of fire fighting equipments to guide against fire outbreak	98(48%)	102(52%)	0(0%)	0(0%)	0(0%)
5.	Regular sensitization in the community on common health hazards.	59(29.5%)	124(62%)	8(4%)	9(4.5%)	0(0%)

Table 4 above showed that 141(70.5%) respondents strongly agreed that industries should be located far away in the outskirts of residential areas to avert environmental hazards and air pollution. Seventy-nine respondents (39.5%) wants food vendors to go for periodic medical check-up while 136(68%) respondents strongly agreed that there should be regular inspection of house in the community by environmental officials. The use of fire fighting equipments in forestalling any fire outbreak was overwhelmingly with 102(52%) respondents agreeing , while 124 (62%) respondents agreed that there is need for sensitization among the community on health hazards.

Relationship between residents' perception of environmental health hazards and their health risk status

Table 4: Correlation analysis between peoples' well-being and environmental health hazards pollution.

	N	Mean	Std. De- viation	Df	r	p.
Peoples' Wellbeing	200	27.1057	2.83100	200	-.027	.006
Environmental Hazards	200	20.0371	7.59364			

** Correlation is significant at 0.05 Level (2 tailed).

Table 4 above showed significant negative relationship between the well-being of people and hazards of environmental pollution (r-value= -.027, p. 006). The p-value .006 is less than the 0.05 level of significant. The null hypothesis one, is rejected.

Table 5: Correlation analysis between the causes of environmental health hazard and people's health.

Variable	N	Mean	Std. Deviation	Df	r.	P.
Causes of environmental health hazard	200	27.1057	2.83100	200	-.170	.000
people's health	200	20.0371	6.25817			

**Correlation is significant at the 0.05 level (2-tailed),

Table 5 showed the Pearson Product Moment Correlation Coefficient (r) which revealed significant negative relationship on causes of environmental health hazard and people's health (r= -.170, p= .000). As environmental health hazards increases, its effects on peoples' health will decreases as well. The p-value .000 is less than the 0.05 level of significance the null hypothesis two is hereby rejected.

Table 6: Correlation between the impacts of environmental health hazard and people's health

Variable	N	Mean	Std. Deviation	Df	R	P-
Impacts of environmental hazards	200	28.1743	3.09004	200	-.124	.018
People's health	200	20.0371	7.59364			

*Correlation is significant at the 0.05 level (2 tailed).

From the table above the (r-value= -.124, p= .018) showed significant negative relationship between the variables tested. As the impacts of environmental health hazards on people increases, their health status will be decreasing. The p-value .018 is less than the 0.05 level of significant. The hypothesis three is rejected.

Discussion of findings

On people's perceptions of environmental hazards and the effect on their health, a significant relationship between the well-being of people and hazards of environmental pollution was observed. This implied that the higher the hazards of environmental pollution, the lower will be the wellbeing of people. This finding was supported in a similar study which showed that the environmental conditions that determine human health depends on the relationship between ecosystems, their populations and the patterns of economic and social development which may contribute positively to human health or when the side-effects of development are not controlled may have negative effects (Chukwu, 2002).

The examination of global environmental change and human health in a similar study showed that environmental problems, and our perceptions of their current and future health effects, have changed over the decades (Mackenbach, 2007). About 20 years back, public health was most concerned about localised environmental degradation, as exemplified by air and water pollution. Global environmental changes are due to increased human pressure on the environment, of which the main drivers are population growth and an increase in per capita resource use and waste production. There are four important categories of global environmental change, each of which form potential, although partly or largely unknown, threats to human health. These are climate change and other changes to the atmosphere, land use changes and soil degradation, freshwater depletion and contamination, and biodiversity loss.

The influence that environmental pollution exerts on our health is very complex and may be modulated by our genetic makeup, psychological factors and by our perceptions of the risk that they present. Nda *et.al.* (2013) also corroborated the wide effects of air pollution on man, animals, plants and property/materials in a study.

The respondents observed that with increasing environmental health hazards, people's health will be at risk. This was corroborated in a study by Bamigboye (2012) which denoted that environmental factors play an important role in health and disease among the population of particular concern are young children and other high risk population group. Furthermore, a great deal of the underlying causes of disease, injury, and death in developing countries lie beyond the purview of the health care system. Some of the causes include physical factors (inadequate sanitation, water, drainage, waste removal, housing, and household energy) and behavioural factors (personal hygiene, sexual behavior, driving habits, alcoholism, and tobacco smoking).

Understanding the science that shows that harmful environment affects human health, it is difficult to watch the damage done to the environment affecting human health and not feel spurred to change (Muir J. (2015). Environment affects our health in a variety of ways. The interaction between human health and the environment has been extensively studied and environmental risks have been proven to significantly impact human health, either directly by exposing people to harmful agents, or indirectly, by disrupting life-sustaining ecosystems and decreasing the life span of the people. This finding was alluded to that concerns about health and environmental hazards transcend the academic, scientific, and regulatory worlds. They are also of compelling interest to the public, who often recognize a relationship between environmental hazards and health (Maatanyet. al/ 2010).

Conclusion

Findings from the study revealed that the well-being of people of Atan Oba community was significantly influenced by the high environmental pollution and also causes or sources of the pollution. The environment being the basis of life on earth must be appropriately managed by human being. A polluted environment brings stress, irritability and unpleasant living standards. Environmental management is the key to economic growth; it is also the improvement of one's ability to convert available resources into valuable added assets. Government at all levels should regard environmental management as one of its highest priorities for positive impacts on the environment for healthy living of the populace.

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