

# SAFETY AWARENESS OF EMERGENCY AMONG STUDENTS OF A STATE UNIVERSITY IN NORTHWESTERN NIGERIA

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## ABSTRACT

Nigeria has had its own fair share of both natural and man-made disasters in recent times. Kaduna state is one of the states that have experienced such problems. The aim of this study is to elicit the socio-demographic characteristics, power of observation, personal safety measures, availability of some emergency facilities and ability to seek for assistance in an event of emergency or disaster. It was a cross sectional descriptive study carried in March 2014. Majority (82.7%) of the respondents were male students of Kaduna State University, whose mean age was  $22.6 \pm 2.8$  years and age range of 18 to 28 years. The power of observation among the students was poor and so was the basic knowledge of first aid. Only 8.3% and 31.4% reported seeing fire extinguisher and buckets full of sand in and around buildings. Similarly, only 29.0%, 31.0%, 14.8% and 6.5% of the students had the phone numbers of ambulance service provider, federal road safety office, fire service office and the chief security officer of the university. There is the need to create awareness and knowledge on emergency/disaster as well as basic first aid practices amongst the students who can be change agents and are likely to influence others.

**Key words:** Disaster, disaster preparedness, basic first aid, students

## INTRODUCTION

To create disaster awareness and knowledge calls for a comprehensive understanding of what disaster is all about.

Disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extra-ordinary response from outside the affected area or community (WHO). Disasters are often classified according to their speed of onset (rapid or slow), or the cause (natural or man-made) (Joshua et al., 2014).

Natural disasters are caused by biological, geological, seismic, hydrologic or meteorological condition or processes in natural environment. The list of natural disasters include weather phenomena such as tropical storms, extreme heat or cold, winds, floods, earthquakes, landslides, and volcanic eruptions.

Human-made disasters are disasters or emergency situations where the principal direct cause(s) are identifiable human actions, deliberate or otherwise. Disasters caused by humans include road traffic

accidents, industrial accidents, release of hazardous materials, collapse of buildings and insurgency among others.

Factors that are contributing to disaster vulnerability includes poverty, population growth, rapid urbanization, transition in cultural practices, environmental degradation, lack of awareness and information, war and strife among others (IDRS, 2007; Joshua et al., 2014).

The physical, social and economic losses caused by disasters are particularly harsh for developing countries since they have a long-range and depressive effect in the development process. Each year, approximately 300 natural disasters occur worldwide, exacting a human toll of approximately 250,000 lives (Noji, 1997). The impacts of the disasters are deeply related with the socio-economic conditions, traditions, culture and the unchecked climate changes of the communities. In the past 20 years, natural disasters have claimed the lives of 3 million people and have negatively affected the lives of at least 800 million more (Noji, 1997).

Kaduna town has experienced two types of disasters of recent that is manmade and natural all of them with tremendous impact on the people of the affected areas. Recent happenings starting from about three decades ago have unshared in spontaneous riots that led to the loss of lives and the destruction of property worth millions of naira. For instance, Ajibua, (2008) upholds that the recurrences of violent conflict, especially in Kaduna metropolis are either caused by communal, ethno-religious or politically motivated (figure 1). Instances include the introduction of the Shari'a legal system in Zamfara State a predominantly muslim area with a homogenous cultural background had a smooth implementation. An attempt to do so in Kaduna state that is multi-ethnic and multi-religious did not meet a smooth implementation ground like Zamfara, rather, it resulted into a violent conflict that led to the death of well over 5,000 people with destruction of property worth billions of naira.

Kaduna town has also witnessed floods ranging from flash floods; pond ages floods and river flood. The most memorable one is linked to the heavy rainfall between 3 and 5<sup>th</sup> September, 2009. According to Osahor, (2010) the downpour was considered the heaviest in 40 years (figure 2), It caused the rivers to overflow its banks flooding farmlands and damaging properties worth millions of Naira, therefore, causing displacement of people living around the river at Nassarawa, Kigo road, Rigasa. Tudun wada, Malali and other communities along the river flood plain.

Therefore, the aim of the study is to elicit the socio-demographic characteristics, power of observation, personal safety measures, availability of some emergency facilities and ability to seek for assistance in an event of emergency or disaster. Secondly, to make the students know the importance of thinking and acting safe at any given environment whether at work place, at home, at play or during political campaign.



Figure 1: Community in ashes from violent clashes in Nigeria. Source: NEMA



Figure 2: Flood ravaged community in Nigeria. Source: NEMA

## MATERIALS AND METHODS

### Study Area

Kaduna State University established about ten years ago operates 2 campuses that is Kaduna as the main Campus and Kafanchan Campus. The data for this research was obtained from three faculties instead of five faculties that make up Kaduna Campus. The faculties that were considered for this study are the faculty Science, faculty of Arts and the faculty of Social and Management Sciences basically due to the large number of their students.

### Study Population and Study Design

The Study population was students of Kaduna State University and it was cross sectional descriptive study carried in December, 2013 to assess safety awareness of disaster and response during emergency among students of Kaduna State University, Kaduna campus using pretested semi-structured questionnaire.

### Sample Size and Sampling Technique

It is a whole population based study. Purposeful sampling

was used, all the students that were present in science lecture theatre on the day of the study and consented to participate were included.

#### Data Collection Tools

Semi- structured questionnaire were used to collect the necessary information which was divided into 5 areas namely: socio-demographic characteristics, power of observation, personal safety, emergency facilities and contacts of person important in emergency situation. The questionnaires were pretested at Ahmadu Bello University, Zaria, and then fine tuned.

#### Data Analysis and Ethical Clearance

The collected filled questionnaires were cleaned and entered into SPSS version 17.0 and analyzed and the results were presented in form of tables and charts. Permission was obtained from the school and students willing to participate in the study. Participation in the study was voluntary.

#### RESULTS

Majority of the respondents were male (82.7%), the age range of all the respondents was 18 – 28 years while the mean age was  $22.9 \pm 2.82$  years. Considering the power of observation, 59.9% of the students responded that SLT

has more than two exit points while 13.4 % said no and 26.7% were not sure of the number of the exits. As for the sitting capacity of the hall, 34.7% answered that they were aware of the hall capacity, 45.5% did not know while 26.7% were not sure of that.

75.5% accepted that ventilation in the hall was good and adequate while 21.3% were of the opposite opinion. 60.3% also reported that the lighting in the hall was adequate and 40% said it was inadequate. About 51% of the study population described the floor of the hall as non-slippery reducing proneness to fall and injury and 39% ticked the option that the floor was slippery (table 1).

About 28.2% of the respondents had knowledge of the number of entrances of the hall, only 8.3% reported seeing the fire extinguishers where they were kept and 31.4% observed the stationed buckets full of sands kept around the building. A small percentage (30) had some knowledge on basic first aid (table 2).

Twenty nine percent (29.0%), 31.0%, 14.8%, 21.3%, and 6.5% of the respondents had phone numbers of ambulance service officer, federal road safety emergency number, fire service officer, chief security officer of the school respectively. 38.6% and 32.9% of the respondents had phone numbers of their immediate family member (parents/siblings) and medical personnel respectively (table 3).

**Table 1:** The power of observation by the respondents (n= 277)

Variable	frequency	percentage
<b>Does Science Lecture Theatre has more than 2 outlets?</b>		
Yes	166	59.9
No	37	13.4
Do not know	74	26.7
<b>Is the ventilation in the SLT adequate?</b>		
Yes	209	75.5
No	59	21.3
Do not know	9	3.2
<b>Do you know the sitting Capacity of the SLT?</b>		
Yes	96	34.7
No	126	45.5
Do not know	55	19.9
<b>Is the Lighting of the hall adequate?</b>		
Yes	167	60.3
No	110	39.7
<b>Is the floor Slippery?</b>		
Yes	107	38.6
No	143	51.6
Do not know	27	9.7

**Table 2:** Personal safety measures by the respondents (n=277)

Variable	frequency	percentage
<b>Do you know all the exit/entrances of the hall?</b>		
Yes	78	28.2
No	102	36.8
Do not know	97	35.0
<b>Is there fire extinguisher(s) in the hall?</b>		
Yes	23	8.3
No	134	48.4
Do not know	120	43.3
<b>Is there sand in bucket(s) around the hall?</b>		
Yes	87	31.4
No	135	48.7
Do not know	55	19.9
<b>Is there first aid box in the hall?</b>		
Yes	51	18.4
No	125	45.1
Do not know	101	36.5
<b>Do you have basic knowledge of first aid?</b>		
Yes	82	29.6
No	195	70.4

**Table 3:** Availability of phone numbers of some important emergency agencies/persons (n=277)

Variable	frequency	percentage
<b>Do you have phone number of any ambulance service provider?</b>		
Yes	81	29.2
No	196	70.8
<b>Do you know the emergency number Federal Road Safety Corp?</b>		
Yes	86	31.0
No	191	69.0
<b>Do you have phone number of Kaduna Fire Service?</b>		
Yes	41	14.8
No	236	85.2
<b>Do you have phone number of any medical personnel?</b>		
Yes	91	32.9
No	186	67.1
<b>Do you have phone number of daddy /mummy/siblings?</b>		
Yes	107	38.6
No	170	61.4
<b>Do you have phone number of KASU Chief Security Officer?</b>		
Yes	18	6.5
No	259	93.5

## DISCUSSION

The study reveals that under the power of observation, students knowledge of an exit point is very high but they do not view the exits points as escape route but when in danger no one will need to tell anybody how to escape. Here an exit point could be door or window in terms of emergency. About 13.4% felt the hall does not have more than two exit points. Perhaps they feel the door could be the only point of entry or exit. During emergency, people can discharge themselves faster through the windows in a crisis situation. The remaining 26.7% of respondents are not sure whether the hall has more than two outlets and that sound very strange for an undergraduate that is not visually impaired not to see clearly inside of a hall they are all used to because most of academic and other social events in the university take place in this hall.

The hall is well structured with four large doors two at the front and two at the back with over twenty windows (non-burglar proof in nature). The sitting capacity of the hall is 500, the knowledge of this will help someone to assess at what point is the facility over stretch or not so that in a situation of a stampede they will know where to follow. Less than half of the respondents know the hall capacity. About three quarter of the students agreed that the hall is well ventilated. In terms of lightening, slightly above half of the students observed that the light is okay while a little below that feels the lightening is poor. The fact of the matter is that the hall is well constructed that light is only needed at night time. However, there is proper lightening and a standby generator just for the hall. Furthermore the respondents with regard to the nature of the floor were asked if the floor is slippery and could make one prone to fall. Approximately 39% feels the floor is slippery against 51.6% who acknowledged the floor is very okay which is believed to be so because adequate steps are provided right from the base of the hall to the top of the theater. So there is no threat of falling under normal condition. The power of observation is to make one security conscious and alert by trying to identify strange people, object and map out escape routes when one's life is threatened.

In addition to observation, the variable of personal safety in disaster management was analyzed among the respondents. Here again, the students misconceived what is an outlet, exit or entrance points as such they gave conflicting figures. While about 166 respondents accepted the hall has more than two outlets, only 78 respondents claimed they know all the exit/entrance of the hall. One hundred and seven (107) respondents said they do not know all the exit points while 97 are not sure. Being that as it may be this exercise will serve as an eye opener to the students that any free point in a building can serve as an exit point either to escape or to enter on rescue mission.

The availability of a fire extinguisher within the hall was also inquired upon. Twenty three (23) respondents accepted that the hall has fire extinguisher as against 134 who said no, while 129 respondents are not sure. The need for a fire extinguisher is to be able to put off fire at a starting point to avoid a disaster but the hall at the moment has not even a single fire extinguisher so the students respond to this question is completely wrong.

The hall is not provided with any first aid box which was observed by 125 respondents. The essence of first aid box is for the primary form of medical assistance before the main intervention by specialist. The absence of a first aid box in the hall could be due to its proximity to the University Clinic which is less than a hundred meters to

the hall.

Another safety device is sand in a bucket which can also be used in putting off fire early enough to stop it from spreading. About 135 students observed that there was no sand in a bucket inside the hall which is the obvious as against any other response. Majority of the respondents have no basic knowledge of first aid box, this similar to the study by Joshua et al (2012). To be aware and conscious of disaster, we need to be proactive in disaster management by providing the necessary equipment.

Furthermore, disaster requires prompt and immediate response. For this to be of help emergency facilities are of invaluable need. For instance, the need for an ambulance at a point of disaster will help to evacuate victims to hospital. 196 respondents have no access to any ambulance service, while 236 do not have the hot line number of Kaduna fire service. In line, 191 respondents acknowledged not having the emergency number of the Federal Roads Safety Corps in Kaduna. In the case of disaster most of the respondents cannot lay claim to any rescue emergency facility but will rather just look up to heaven for help which is not the ideal thing at this level of human civilization and development.

Closely associated to emergency facility is to seek to establish contact for assistance especially from close acquaintances back home. An appreciable number of students about 107 accepted they know their parents and sibling phone number by heart indicating that they can get to their parents or siblings easily when they are in trouble while the whooping 170 respondents will hardly find assistance from home because they do not have their immediate family numbers intuitively. To also call for assistance, more than three quarter of the respondents do not have the University Chief Security Officer's phone number as against 18 respondents who claimed to have. As for whether the respondents have the phone number of any medical personnel, 186 responded in the negative while 91 claimed yes. This also indicates that the respondents have limited contact to make when seeking for help.

## CONCLUSION

Looking at the major aspects that can avert or help in a situation that call for assistance when disaster strikes, the respondents have poor power of observation as they could not adequately take cognizance of their immediate environment. The students are also not very conscious on personal safety as well as accessibility to emergency facilities as such cannot therefore, timely call either individual, parents, security or medical personnel for prompt rescue/attention in terms of disaster. There is need to create awareness and knowledge on emergency/ disaster and basic first aid among students who can be agents of change and can teach others both at home and places of work among others.

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