

## **Knowledge and Practice of Flood Disaster Prevention among Residents of Ibadan Metropolis, Oyo State, Nigeria.**

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### **ABSTRACT**

Prevention of flood disaster, which is increasingly becoming an inexorable environmental problem in most urban cities, has become a topical world concern. The perennial ways at which flood disaster occur has posed serious physical, mental social and economic burden to individuals, community and the nation at large. This study was designed to assess knowledge and practice of Flood Disaster Prevention (FDP) among residents of Ibadan metropolis, Oyo state, Nigeria, the moderating effects of flood disaster experience was also examined. Descriptive survey research design was adopted for the study; two Local Government Areas (LGAs) (Ibadan South West and Ibadan South East) with high flood vulnerability were purposively selected out of the five LGAs in Ibadan metropolis. One hundred and twenty (120) males and female registered landlords from all flood prone communities of the two LGAs were respondents (Ibadan South West - 60) and Ibadan South East - 60). Self developed and validated questionnaire with two sub scales was used as research instrument, with reliability coefficient of Knowledge ( $r=0.88$ ), and FDP Practice ( $r=0.79$ ) scales. Two research questions and two hypotheses were tested. Demographic data and research questions were answered using descriptive statistics of simple percentages, charts, mean and standard deviation while inferential statistics of t-test was used for hypothesis testing at 0.05 alpha levels. The study found that residents of flood prone areas in Ibadan metropolis did not have adequate knowledge of flood disaster prevention; they had bad practices towards flood disaster prevention. Moreover, respondents with personal flood disaster experience are better in flood disaster prevention knowledge and practices over other respondents that had indirect flood disaster experience. The study recommended that vulnerable population should as a matter of utmost necessity be exposed to flood prevention education by Government and Nongovernmental organisations, which will lead to improvement in environmental practices of the people if they are well informed, thus preventing flood and by extension lead to reduction in loss of lives and properties to flood disaster.

**KEY WORDS:** Flood disaster prevention, knowledge, practice, flood disaster experience

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### **I. INTRODUCTION**

Environmental disasters have become common phenomenon in the world. There is no doubt that the disaster is threatening the existence of man in the environment. Flood, earthquake, slides, inferno and hurricane have created concern across the globe for preparedness, and the signs are just too apparent to be ignored. Flood disaster is the most common environmental problem in Nigeria and has posed tremendous danger to people's lives and properties. The impacts of flood have increasingly assumed from significant to threatening proportions. Apart from houses that are usually swept off or badly destroyed by flood, school buildings and bridges sometimes collapse as well; markets places and farmlands are submerged for weeks and sometimes are washed away. On a global basis, there is evidence that the number of people affected and the socio-economic damages resulting from flooding are on the rise at an alarming rate (Olasunkanmi, 2013). In view of this, society must move from the current paradigm of post-disaster response, plans and efforts must be undertaken to break the current event-disaster cycle.

More than ever, there is need for decision makers to adopt holistic approaches for the prevention of flood disaster. Otherwise, the developmental vision of Nigeria to be among the first top twenty nations with leading economy by the year 2020 may be a mirage, if lives and properties are not safe from the frequent occurrence of flood in the country. Flood disaster management according to National Emergency Management Agency (NEMA) (2012) involves preventive measures against flood, preparing for it before it occurs as well as supporting and rebuilding society after the disaster had occurred, and also extend to fine-tuning preventive

measures against recurrence. Meanwhile, over the years two patterns or tradition of flood disaster management have been obtained in Nigeria. These according to James (2000) have been represented as the “vulture concept” and the “eagle concepts”. The vulture concept is reactive in essence while the eagle concept is proactive. However, in line with the prevailing global direction, NEMA has launched paradigm shift from the abiding reactive tradition of flood disaster management to a proactive pattern (prevention).

There are some schools of thought about the preponderance of floods all over the globe especially in the tropics. A school of thought is of the view that there have been a lot of abuses heaped on the physical environment of man, and that the environment is only responding to the abuses heaped on it. The abuses include but not limited to poor planning of the physical environment, poor management of wastes, inadequate drains for the built up areas and others. Ologunorisa (2004) asserted that construction of building along flood plains, large scale encroachment into the river flood plains, large scale road construction with excessive land reclamation, mining in mountainous and hilly area, deforestation, and reclamation of land in alluvial plains result in flood. Moreover, it is very obvious that blockage of few existing drains with municipal wastes and refuse with eroded soil sediment in the drainage channel always result in back flow of water to cause flood in most Nigeria urban cities like Lagos, Warri, Abeokuta, Ibadan.

Flood disaster is a recurrent environmental problem in Ibadan and destructions emanating from it are quite enormous going by reports of the experiences of the disasters that occurred in 1955, 1961, 1964, 1969, 1978, 1980, 1985, 1987, 1990, 1997, 2011 and 2013. (Amori, Awomeso, Idowu and Makinde, 2012). Several reasons abound to explain the regular occurrence of floods in Ibadan in the last three decades. Chief of these according to Olasunkanmi (2013) are the prevalence of torrential rainstorms, poor sewage management and disposal, poor urban planning and control as shown in the unplanned layout and public apathy to environmental sanitation. Adetunji and Oyeleye (2013) reported that out of 156 respondents to possible causes of flood in Ibadan, 145, 120 and 156 agreed that blocked drainage with waste, building along water channels, poor waste management respectively were responsible for 2013 Apete flood. To corroborate this, Ibadan Urban Flood Management Project (IUFMP) (2012) reported 26,553 buildings found within the statutory set-backs of various streams and rivers within Ibadan metropolis. Meanwhile, the compassionate international disaster response appeals and media reports are giving the public the mistaken impression that disasters are inevitable. These messages obscured the more important message, that there are significant man-made elements in making flood hazard turn to a disaster, and that understanding this, is a necessary prerequisite for attacking the root causes and preventing them. Moreover, taking flood disasters as social, rather than natural phenomena has implication of allowing for proactive, rather than reactive strategies, thus, it is possible to take actions or inaction towards its prevention. Flood disaster prevention strategies will succeed if people, governments, specialists, leaders and citizens understand that flood disaster is an evidence of their own neglected responsibilities rather than the presumed consequence of natural forces or some other-worldly act of gods or river’s evil spirit. Once this basic understanding is acknowledged, further awareness is needed concerning the various options to prevent flood disasters. Oriola (2000) submitted that when people lack ecological knowledge, environmental management systems are less effective due to unintentional harmful practices of the uninformed public.

Adequate knowledge is important to man’s existence, particularly in flood disaster prevention. Knowledge can be regarded to as facts, information, skill and understanding one acquires through experience or education. Ibimilua and Ibimilua (2014) opined that knowledge is much more than a collection of facts, it relates to the whole system of concepts, beliefs, and perceptions that people hold about the world around them. This includes the way people observe and measure what is around them, how they set about solving problems, and how they validate new information. It also includes the process whereby idea is generated, stored, applied, and transmitted to others (communication). Environmental knowledge creates awareness, improves skills, values, experiences and determination which can help people solve different environmental problems like flooding.

Meanwhile, as important as knowledge is, it is not enough for establishment of positive environmental practices, even if people are well informed, some forms of commitment by the people, is still required to put the information into practice. One’s knowledge towards a thing is exemplified in what one does; the way one does something (action) as well as why one fails to do a thing (inaction). The at-risk practices that causes flood includes: encroachment into the river course such as construction of structure within a flood plain, blockade of natural or artificial drainage channels with debris, sand, container or any structure, land degradation and deforestation, poor waste management, the contributions of all these at-risk practices to flood disaster cannot be overemphasized.

Experience is a product of exposure gathered through repeated encounter over a period. Emily, Jean, Cherry, Eliza and Polly (2014) discovered that, in a multi-hazard environment, people who have been previously exposed to disaster are far more aware than people without the disaster experience. They also stressed the importance of previous disaster experiences in people’s judgments about risk. Moreover, researchers have shown that more intense personal experiences such as suffering damage, results in elevated

perceptions of risk and prevention of disasters (Barnett and Breakwell 2001, Lindell and Perry 2011). Meanwhile, distinction is often made between direct personal experience and vicarious experience. Direct personal experience is more accessible in memory, and this gives it a greater potential to influence perceived personal risk and preparedness measures to prevent disaster. Report of findings of Sattler, Kaiser, Hittner (2000) indicated that previous direct disaster experiences were significantly associated with perception of disaster risk, prevention and preparedness.

NEMA, (2009) believed that man's safety against flood disaster depends on environmental facts, attitudes and ultimately good environmental practices. This presupposes that safety tips are readily available, only need to be known and reflects in man's attitude and practices. Meanwhile, as part of means of promoting sustainable livelihood, Kawawu, Adamu and Umar (2015) submitted that Community-Based Disaster Mitigation (CBDM) now preaches joint efforts of Non-Governmental Organisations, government agencies likewise the affected communities as one of the important approaches in reducing disaster risks. In view of the foregoing, it is pertinent to find out the level of awareness of flood disaster prevention among the vulnerable population, identify their flood prevention practices, Premised on the aforementioned, the researcher found out level of knowledge and practices of Ibadan residents towards flood disaster prevention in Ibadan metropolis of Oyo state.

### **Research questions**

- 1) Do Ibadan Metropolis residents have adequate knowledge about prevention of flood disaster?
- 2) Do residents of Ibadan Metropolis have good practices towards prevention of flood disaster?

### **Hypotheses**

1. There will be no significant difference in knowledge of flood disaster prevention among Ibadan Metropolis residents based on disaster experience.
2. There will be no significant difference in practice towards prevention of flood disaster among Ibadan Metropolis residents based on disaster experience.

## **II. METHODOLOGY**

Descriptive survey research design was used for the study, the choice of the design was considered appropriate and suitable, since there was no manipulation of variables. The population for the study was all residents of flood prone areas in Ibadan metropolis, Oyo state. The sample for the study was one hundred and twenty (120) respondents comprising residents of flood prone areas in highly vulnerable communities in Ibadan metropolis. Purposive sampling technique was used to select two Local Governments with high vulnerability, out of five Local Governments in Ibadan metropolis, that is Ibadan south west and Ibadan south east Local Government areas. Cluster sampling technique was used to draw representatives from the twenty communities that are prone to flood disaster in the two Local Government areas. The study finally recruited one hundred twenty (120) volunteers from the twenty flood prone communities to fill the questionnaire.

The research instruments used are self develop questionnaire to generate data for the study, it has two sub-scales apart from socio demographic section, the first subscale KFDPS sought information about knowledge of flood disaster prevention while the second subscale FDPPS dealt with practices of respondents towards flood disaster prevention. These subscales of the instrument have reliability coefficient of 0.88 and 0.79 respectively. The research instrument was field tested using 20 residents of flood prone areas who were not part of the sample drawn for the study.

The principal investigator recruited and trained six research assistants and the team administered the research instruments to the respondents and was collected on the spot after completion, to prevent loss and incomplete filling. The data generated were analyzed using inferential statistics of T-test for hypotheses testing, while descriptive statistics of frequency counts, simple percentages, bar and pie charts, mean and standard deviation were used to answer research questions and analyse demographic data.

### III. RESULTS AND DISCUSSION OF FINDINGS

#### Socio-Demographic Characteristics of the Participants

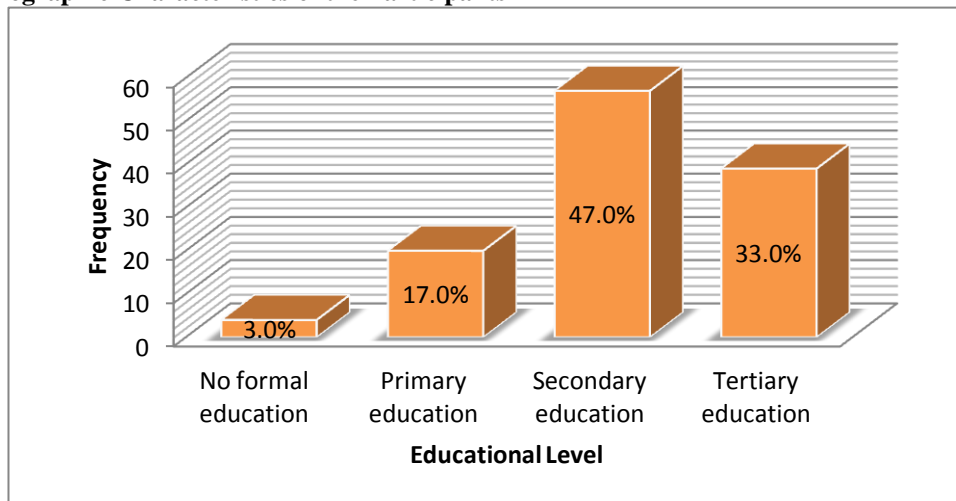


Figure 1: Bar chart illustrating educational level of the participants

Fig. 1 revealed that 4 (3.0%) participants had no formal education, 20 (17.0%) obtained Primary School Certificate, 57 (47.0%) possessed WASCE/SSSE, while 39 (33.0%) participants had tertiary education. This showed that majority of the participants possessed WASCE/SSSE.

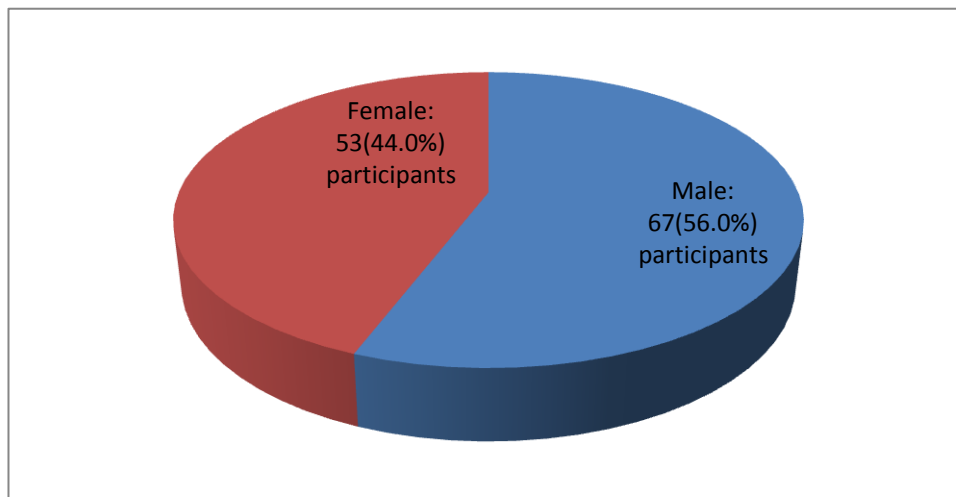
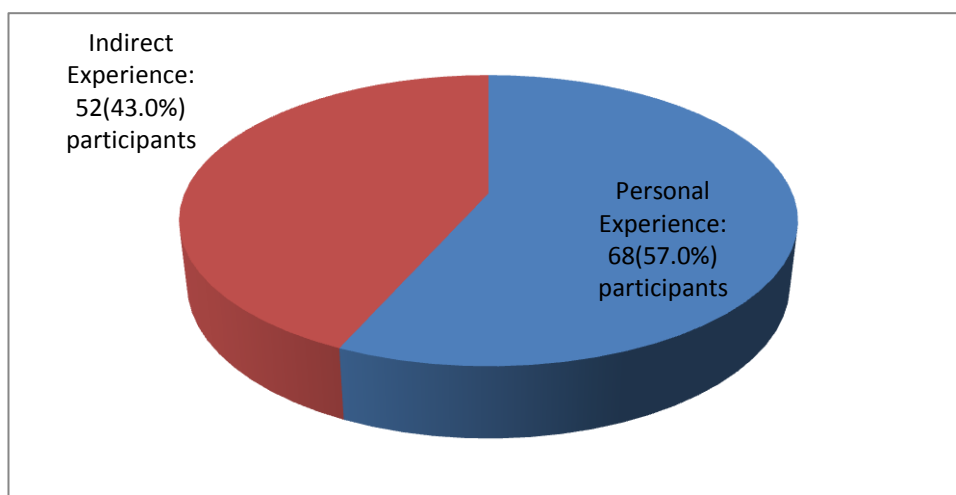


Figure 2: Pie chart illustrating gender of the participants

Fig. 2 revealed that 67 (56.0%) participants were male, while 53 (44.0%) were female. This showed that most of the participants were male.



**Figure 3: Pie chart illustrating flood disaster experience of the participants**

Fig. 3 revealed that 68 (57.0%) participants had personal flood disaster experience, while 52 (43.0%) had indirect flood disaster experience. This showed that most of the participants had personal flood disaster experience.

**Research Question 1:** Do Ibadan Metropolis residents have adequate knowledge about prevention of flood disaster?

**Table 1.1: Frequency table showing distribution of participants' knowledge of flood disaster prevention**

S/n	Question items	True	False	Mean	Std. Dev
1	Flood disaster occurs when flooding leads to destruction of lives and properties	60 50.0%	60 50.0%	1.50	0.50
2	Flood will not lead to flood disaster if human being stay away from flood plain	55 45.8%	65 54.2%	1.46	0.50
3	Flood disaster is not preventable	62 51.7%	58 48.3%	1.52	0.50
4	Allowing rivers to flow naturally can prevent flood disasters	55 45.8%	65 54.2%	1.54	0.50
5	Clearing of gutters or drain regularly can prevent flood disaster	50 41.7%	70 58.3%	1.42	0.49
6	Building on a flood plain (area that is close to a river) can cause flood disaster	53 44.2%	67 55.8%	1.44	0.49
7	It is not necessary to consider flood plain topography before erecting structure	51 42.5%	69 57.5%	1.43	0.49
8	It is better to prevent flood disasters because no amount of sympathy and relief can make up for the pain, grief and the losses suffered	56 46.7%	64 53.3%	1.47	0.50
9	Channelization of rivers can prevent flood disaster	58 48.3%	62 51.7%	1.48	0.50
10	Maintaining stream/river set-back during building construction prevents flood disaster	44 36.7%	76 63.3%	1.37	0.48
11	Flood disasters needs to be prevented because it causes damage to public infrastructure like road, culvert and bridges	61 50.8%	59 49.2%	1.51	0.50
12	Water borne diseases outbreak can occur in a community that fails to prevent flood disaster	49 40.8%	71 59.2%	1.41	0.49
13	Flood disasters can affect economy of the country if not prevented	42 35.0%	78 65.0%	1.35	0.48
14	Flood forecasting and warning is a prerequisite for successful flood disaster prevention	57 47.5%	63 52.5%	1.48	0.50
15	Strictly obeying physical planning and building regulations goes a long way in preventing flood disaster	56 46.7%	64 53.3%	1.47	0.50

16	Strictly obeying environmental laws can prevent flood disaster	58 48.3%	62 51.7%	1.48	0.50
17	Removal or demolition of structures obstructing drainage can prevent flood disaster	60 50.0%	60 50.0%	1.50	0.50
18	One of the most potent preventive measures against flood disaster is improved vegetation	47 39.2%	73 60.8%	1.39	0.49
				Weighted Mean=	1.46
				Criterion=	1.50

As indicated in table 1 60 (50.0%) respondents affirmed that flood disaster occurs when flooding leads to destruction of lives and properties, while 60 (50.0%) did not. In addition, 55 (45.8%) respondents established that flood will not lead to flood disaster if human being stay away from flood plain, while 65 (54.2%) responded contrary to that. Moreover, 62 (51.7%) respondents established that flood disaster is not preventable, 58 (48.3%) did not. Furthermore, 55 (45.8%) respondents stated that allowing rivers to flow naturally can prevent flood disasters), while 65 (54.2%) responded against it. Besides, 50 (41.7%) respondents affirmed that clearing of gutters or drain regularly can prevent flood disaster, while 70 (58.3%) did not. Also, 53 (44.2%) respondents established that building on a flood plain can cause flood disaster, while 67 (55.8%) responded contrary to that.

Furthermore, 51 (42.5%) respondents affirmed that it is not necessary to consider flood plain topography before erecting structure, while 69 (57.5%) did not. In addition, 56 (46.7%) respondents established that it is better to prevent flood because no amount of sympathy and relief can make up for the pain, grief and the losses suffered, while 64 (53.3%) did not. Besides, 58 (48.3%) respondents expressed that channelization of rivers can prevent flood disaster, while 62 (51.7%) did not. Moreover, 44 (36.7%) respondents affirmed that maintaining stream/river set-back during building construction prevents flood disaster, while 76 (63.3%) did not. Besides, 61 (50.8%) respondents established that flood disasters needs to be prevented because it causes damage to public infrastructure like road, culvert and bridges, while 59 (49.2%) did not. Also, 49 (40.8%) respondents affirmed that water borne diseases outbreak can occur in a community that fails to prevent flood disaster, while 72 (59.2%) did not.

In the same vein, 42 (35.0%) respondents affirmed that flood disasters can affect economy of the country if not prevented, 78 (65.0%) did not. In addition, 57 (47.5%) respondents established that flood forecasting and warning is a prerequisite for successful flood disaster prevention, while 63 (52.5%) disagreed. Besides, 56 (46.7%) respondents expressed that strictly obeying physical planning and building regulations goes a long way in preventing flood disaster, while 64 (53.3%) did not. Furthermore, 58 (48.3%) respondents agreed that strictly obeying environmental laws can prevent flood disaster, while 62 (51.7%) had contrary reaction to it. Besides, 60 (50.0%) respondents affirmed that removal or demolition of structures obstructing drainage can prevent flood disaster, while 60 (50.0%) did not. Also, 47 (39.2%) respondents stated that one of the most potent preventive measures against flood disaster is improved vegetation, while 73 (60.8%) disagreed. Table 1 further revealed that the obtained weighted mean value of 1.46 was less than the criterion of 1.50; therefore, it could be inferred that, residents of Ibadan Metropolis did not have adequate knowledge about prevention of flood disaster?

**Research Question 2:** Do residents of Ibadan Metropolis have good practices towards prevention of flood disaster?

**Table 2: Frequency table showing distribution of participants' practice towards prevention of flood disaster in Ibadan Metropolis**

S/N	Question items	OF	OC	RA	NR	Mean	Std. Dev
1	I clear the gutter or drain of debris	41 34.17%	45 37.5%	18 15%	16 13.33%	1.49	0.83
2	I allow run off to move freely in the drain when it is raining by not throwing refuse into it	42 35.0%	26 21.7%	51 42.5%	1 0.8%	1.88	0.77
3	I encourage planting of trees and shrubs in my surrounding	28 23.3%	22 18.3%	33 27.5%	37 30.8%	2.57	1.16
4	I dump sachet or bottle of water in the waste bin	28 22.33%	27 22.5%	59 49.17%	6 5.0%	2.36	0.90
5	I pay for the service of refuse contractor for the refuse generated in my house or industry	29 24.2%	30 25.0%	51 42.5%	10 8.3%	2.35	0.94

6	I encourage free flow of water in natural and artificial water ways by not blocking it	34 28.3%	27 22.5%	57 47.5%	2 1.7%	2.23	0.88
7	I encourage soil percolation of run-off water in my compound	22 18.3%	24 20.0%	21 17.5%	53 44.2%	2.88	1.17
8	I discourage wrapping of faeces in polythenes	11 9.2%	22 18.3%	48 40.0%	39 32.5%	2.96	0.94
9	I stay away from river flood plains for any construction	35 29.2%	26 21.7%	58 48.3%	1 0.8%	2.21	0.88
10	I do participate in weekly and monthly environmental sanitation	35 29.2%	22 18.3%	60 50.0%	3 2.5%	2.26	0.91
11	I provide toilet facilities for use in my house	39 32.5%	17 14.2%	16 13.3%	48 40.0%	2.61	1.30
12	I provide refuse drum for storing of refuse in my house	37 30.8%	20 16.7%	19 15.8%	44 36.7%	2.58	1.27
						Weighted Mean= 2.14	Criterion= 2.50

As shown in table 2, 41 (34.17%) respondents often clear gutter or drain of debris, 45 (37.5%) occasionally engage in it, while 18 (15%) and 16 (13.33%) respondents rarely and never engaged in it respectively. In addition, 42 (35.0%) respondents reacted that they often allow run off to move freely in the drain when it is raining by not throwing refuse into it, 26 (21.7%) occasionally engage in it, 51 (42.5%) rarely do that, while 1 (0.8%) respondents never engaged in it. Furthermore, 28 (23.3%) respondents often encourage planting of trees and shrubs in my surrounding, 22 (18.3%) occasionally engage in it, 33 (27.5%) hardly engage in that, while 37 (30.8%) never engage in it. More so, 28 (22.3%) respondents often dump sachet or bottle of water in the waste bin, 27 (22.5%) occasionally engage in it, 59 (49.2%) hardly engage in it, while 6 (5.0%) never involved in it.

It was also revealed that, 29 (24.2%) respondents reacted that they often pay for the service of refuse contractor for the refuse generated in their house or industry, 30 (25.0%) occasionally engage in it, 51 (42.5%) hardly engage in that, while 10 (8.3%) never engage in it. Also, 34 (28.3%) respondents often encourage free flow of water in natural and artificial water ways by not blocking it, 27 (22.5%) occasionally engage in that, 57 (47.5%) rarely do this, while 2 (1.7%) participants never engage in it. Moreover, 22 (18.3%) participants responded that they often encourage soil percolation of run-off water in their compound, 24 (20.0%) occasionally engage in it, 21 (17.5%) rarely involved in it, while 53 (44.2%) never partake in that. Equally, 11 (9.2%) respondents often discourage disposal of faeces by wrapping it in polythene and dropping it in a nearby stream, 22 (18.3%) occasionally involved in it, 48 (40.0%) hardly engage in it, while 39 (32.5%) respondents never involved in it.

In the same vein, 35 (29.2%) respondents often stay away from river flood plains for any construction, 26 (21.7%) occasionally involved in that, 58 (48.3%) hardly engage in it, while 1 (0.8%) never involve in that. Besides, 35 (29.2%) respondents often participate in weekly and monthly environmental sanitation, 22 (18.3%) occasionally participate, 60 (50.0%) hardly participate, while 3 (2.5%) participants never participate in it. In addition, 39 (32.5%) respondents often provide toilet facilities for use in their houses, 17 (14.2%) occasionally make provision, 16 (13.3%) hardly provide and use toilet, while 48 (40.0%) respondents never made provision for it. Also, 37 (30.8%) respondents often provide refuse drum for storing of refuse in their house, 20 (16.7%) occasionally engaged in it, 19 (15.8%) rarely involve in it, while 44 (36.7%) participants never engage in it. Table 1.2 further revealed that the obtained weighted mean value of 2.14 was less than the criterion of 2.50; therefore, it could be inferred that, residents of Ibadan Metropolis did not have good practices towards prevention of flood disaster.

### Hypotheses Testing

**Hypothesis one:** There will be no significant difference in knowledge of prevention of flood disaster among Ibadan Metropolis residents based on disaster experience.

**Table 3: T-test showing difference in knowledge of prevention of flood disaster based on disaster experience**

Variable (disaster experience)	N	Mean	Std. Dev.	Df	t-value	Sig. (p value)	Remark
Indirect experience	52	21.8971	3.12973	118	8.935	.000	Sig.
Personal experience	68	27.2500	3.40631				

Table 3 revealed that there was a significant difference in knowledge of prevention of flood disaster among Ibadan Metropolis residents ( $t=8.935, p<0.05$ ). Hence, the null hypothesis was rejected. The table further revealed that, respondents with personal experience had a higher mean score ( $\bar{x}=27.25$ ); which means that, respondents with personal experience had a better knowledge of prevention of flood disaster than their counterparts who had indirect experience with a mean score of 21.90.

**Hypothesis two:** There will be no significant difference in practice towards prevention of flood disaster among Ibadan Metropolis residents based on disaster experience.

**Table 4: T-test showing difference in practice towards prevention of flood disaster based on disaster experience**

Variable (disaster experience)	N	Mean	Std. Dev.	Df	t-value	Sig. (p value)	Remark
Indirect experience	52	24.5441	7.21614	118	6.793	.000	Sig.
Personal experience	68	33.3654	6.82277				

Table 4 revealed that there was a significant difference in practice towards prevention of flood disaster among Ibadan Metropolis residents ( $t=6.793, p<0.05$ ). Hence, the null hypothesis was rejected. The table further revealed that, respondents with personal experience had a higher mean score ( $\bar{x}=33.37$ ); which means that respondents with personal experience had a better practice of prevention of flood disaster than their counterparts who had indirect experience with a mean score of 24.54

#### IV. DISCUSSION OF FINDINGS

This study provided characteristics of residents of flood prone areas in Ibadan, Oyo state that participated in the study and some key attributes in relation to knowledge, and practices towards flood disaster prevention, the study found that residents of flood prone areas in Ibadan metropolis did not have adequate knowledge of flood disaster prevention; they had bad practices towards flood disaster prevention, this result agrees with findings of Famuyiwa and Kadiri (2017), they reported in their study titled :”Knowledge and Awareness of Flood Risk Reduction among residents around Oranyan and Kudeti streams in Ibadan:” that 256(85.3%) which represent the majority of the study population lack knowledge of flood disaster risk reduction. Also, the findings is in consonance with Babalola (2000), result of his study titled:” Human Induced Disasters in Urban Areas: Vulnerability Analysis of Ibadan metropolis:” that 66 (66%) of sampled respondents are of the opinion that flood disaster cannot be prevented, because it is a natural phenomenon, this was so because they lack knowledge of flood disaster vulnerability, that flood disaster is not natural in the real sense of it, it is the hazard that is natural. Since flood disasters are the outcome of flood hazard on vulnerable population, there must be a trigger before flood hazard can lead to a disaster.

Moreover, respondents with personal flood disaster experience are better in flood disaster prevention knowledge and practices over other respondents that had indirect flood disaster experience, this is in line with the work of Lindell and Hwang (2008), they reported that people who have been previously exposed to disaster are far more aware than people without disaster experience. They further explained that because direct experience is more accessible in memory, personal experience has a greater potential to influence perceived personal risk

#### V. CONCLUSION AND RECOMMENDATION

Based on the result of the study, it was concluded that there is gap in knowledge and practices of flood disaster prevention of vulnerable population of Ibadan which is likely to increase incidences of flood disaster in the mega city. The study also concluded that direct exposure to flood disaster make a difference in knowledge and practice towards flood disaster prevention, the respondents with direct disaster experience are better in knowledge and practice of flood disaster prevention than their counterparts with indirect flood disaster experience. This implied that respondents that had personal disaster experience have learnt lesson in a hard way



which has invariably improve their knowledge and practices of flood disaster prevention. Based on the conclusion of the study, the following recommendations were made:

1. Residents of Ibadan metropolis should as a matter of utmost necessity be exposed to flood prevention education by Government and Nongovernmental organisations, to bridge the gap of knowledge, lead to positive environmental practices of the people, thus preventing flood disaster and by extension lead to reduction in loss of lives and properties to flood disaster.
2. More efforts should be designed towards improving environmental knowledge and practices of people with indirect flood disaster experience so that they will not learn their own lesson in a hard way..

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