

Knowledge and Awareness Towards Emergency Response Preparedness Among Large Worship Centres In South-South Region of Nigeria

Abstract

In disaster preparation and mitigation practices, appropriate knowledge and awareness play a vital role in ensuring its effectiveness. The study assessed the knowledge and awareness towards emergency response preparedness among large worship centres in South-South region of Nigeria. Churches with large seating capacity (>1500) indicating large weekend attendance of no less than (1000) congregants that cut-across Akwa Ibom, Rivers, Bayelsa and Edo states were selected for the study. With the aid of questionnaire and descriptive statistics, we collected and analyzed the data for the study respectively. The outcome showed that 72.7% of the respondents agreed, "Emergency preparedness and response to disaster involve adequate plan to prevent an occurrence". The worship centres indicated that they were well prepared (60.1%) for emergency events with adequate knowledge about various emergencies (60.1%). The findings revealed that worship centres have not witnessed hazardous event in recent time (58.5%) and that they perceived electrical damage (53.5%) as the most common emergency at the centres. Mechanical failure (49.1%) was indicated as the major cause of emergency at the centres and most respondents to emergencies are volunteers. Overall, there was adequate knowledge and awareness about emergency response preparedness practices among the worship centres. The study recommended the need for worship centres to develop a common, efficient, coordinated multi-sectoral approach, comprising all-hazard and hazard-specific measures that would ensure preparedness for all types of emergencies.

Keywords: Disaster Management, Emergency Response Preparedness, KAP, Worship Centres, Niger Delta

Introduction

An emergency is an unplanned event that poses immediate risk to health, life, property or environment (Aliyu, 2015). As Ndace (2008) rightly pointed out, "as long as man lives there will surely be one form of disaster or the other". The basic issue in emergency management or disaster management is that it requires adequate preparation before the occurrence of disaster incident (Onuoha, 2012). Emergency include such occurrences as fire, transportation accident, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident such as industrial or car accident, fire outbreak, or sabotage (UNEP, 2010). An emergency procedure involves many essential components and providers involved in rescue operations. The coordination between components and providers directly influence the services provided in an emergency response.

In Nigeria, the concern of government has been in developing the personnel and infrastructure needed to effectively manage emergency. Considering religion organization, Beckett (2018) noted that church organizations have suffered and can suffer both natural and human related disaster such as fires, hurricanes, tornadoes, earthquakes, building collapse and even violence. While primary efforts need to focus on prevention, not all losses can be avoided, particularly when the causes are natural elements, or regional events like chemical releases, riots, or targeted violence. Good emergency response plans help ensure appropriate actions are taken and minimize the effects of any loss.

Churches vary by size, denomination, and geographic location and each has unique needs towards their congregation; however, like every other organizations, all churches are subject to some level of risk. Being prepared in the event of a disaster not only can reduce a loss, but can make the difference between life and death. Creating a plan requires an in depth knowledge of your environment, combined with a risk assessment that identifies the risks to which the organization may be subject. The complexity of the plan will be directly proportional to the size of the organization and facilities. According to Mahdaviazad & Abdolahifar (2014), public education and training that focus on appropriate knowledge, attitudes, and practices play a crucial role in preparedness and disaster mitigation, as “Education is the fundamental bedrock of disaster risk reduction”. Such public education and training should not escape churches as they are subjected to several risks; however, few studies have considered church-related emergency aspects (Van Coller and Akinloye, 2021; Smith, 2016; Kyoo-Man, 2015; Yemi-Jonathan and Obafemi, 2022; Yemi-Jonathan et al., 2022). Although, none of these studies considered the importance of knowledge and attitude in emergency response preparedness, the study therefore aimed at assessing the knowledge and awareness towards emergency response preparedness among large worship centres in South-South region of Nigeria.

Method and Materials

Study Area

The South-South Region of Nigeria is located on $4^{\circ}21'43.2''\text{N}$, $7^{\circ}40'52.8''\text{N}$ and longitude $5^{\circ}8'42''\text{E}$, $9^{\circ}30'7.2''\text{E}$ (Figure 1) protruding towards the Gulf of Guinea on the Atlantic coast of West Africa (Shittu, 2014). The region is a densely populated area in Nigeria. Its population is about 31 million people. The land mass extends over about $70,000\text{ km}^2$, and make up 7.5 percent of Nigeria's landmass. The region consists of Akwa- Ibom, Bayelsa, Cross- River, Delta, Edo and Rivers states. The region lies within the Wet equatorial climate; high cloud cover and fewer sunshine hours cause damp weather conditions throughout most parts of the year.

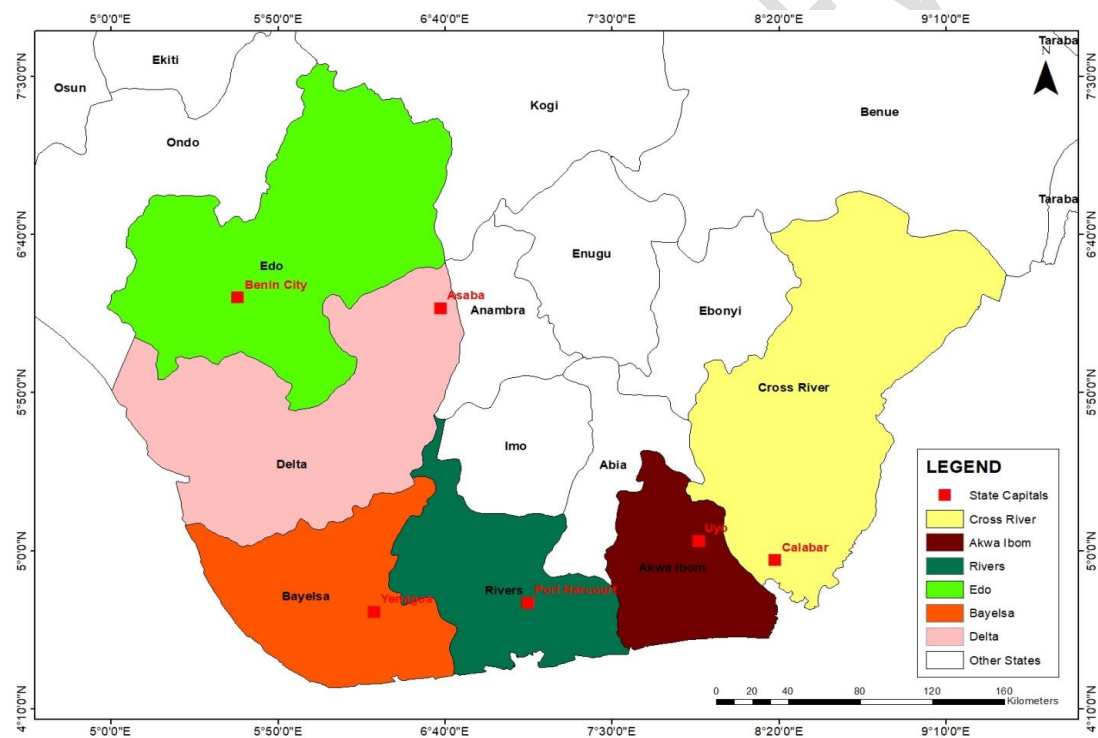


Figure 1: Overview of the Study Area

Study Design and Sample Size

The survey research method was adopted to carry out the study. Survey research is a specific type of field study that involves the collection of data from a sample of elements drawn from a well-defined population through the use of a questionnaire (Visser, Krosnick & Lavrakas, 2002). This method was adopted because it is a suitable and efficient way of studying large

population. The population of the study comprised of all churches and their worshipers within the selected states of study which include Rivers, Edo, Bayelsa and Akwa Ibom State; however, for the purpose of the study based on the eligibility criteria, the population of the study was presented in Table 1.

To get a true representative sample of the target population, the Taro Yamane (1964) formula for sample size determination was used;

$$n = \frac{N}{1 + N(e)^2} \quad (3.1)$$

Where: e= Level of precision (0.05)

N= Population

n= Sample size

1= Constant

$$n = \frac{18400}{1 + 18400(0.05)^2}$$

$$n = \frac{18400}{1 + 18400 \times 0.0025}$$

$$n = \frac{18400}{1 + 46}$$

$$n = \frac{18400}{47}$$

$$n = 391$$

For the study robustness and conveniences, the sample size was adjusted by 9. Therefore, the study total sample size was 400 respondents (Church Officials, Workers/Congregants).

Table 1: Population and Administration of the Questionnaire among the Churches of Study

States	Church Locations	Church Name	Seating Capacity	Percentage	Admin. Questionnaire	Returned Questionnaire
Akwa Ibom	Uyo	Full Life Christian Centre	10000	54.3	217	209
Rivers	Port	Living Faith	4300	23.4	93	82

	Harcourt	Church				
Bayelsa	Yenagoa	Salvation Ministry	2100	11.4	46	46
Edo	Benin	Christ Embassy	2000	10.9	44	44
Total			18400		400	381 (95%)

A total of 400 copies of questionnaire was randomly administered using simple random sampling technique in respondents' selection; however, 375 of the questionnaires were properly filled and subjected to further analysis.

Data Analysis

The retrieved copies of questionnaire were coded and subjected to statistical analysis using Statistical Package for the Social Sciences (SPSS-21) for proper analysis. The data of the study were analysed through descriptive statistics tool such as frequency counts and percentages of response were adopted for the analysis. The use of such statistics allows the researcher to present the evidence of the study in a way that can be understandable and makes conclusion concerning the variables of study.

Result

Demographic Characteristics of the Respondents

Table 2 of the study presented the demographic details of the respondents. The analysis indicated that 51.2% (195) of the respondents are male, 38.1% (145) between the age of 30-40years, 45.4% (173) of the respondents are single with formal education at least of primary level (34.9%-132) and 34.6% (132) engaged in professional occupation. The analysis showed that most respondents 32.5% (124) have been worshipping at their centres between 2 to 4years and 33.3% (127) are in the ushering units of their worship centers.

Table 2: Socio-economic Characteristics of the Respondents

Variables	FLCC		LFC		SM		CEB – Z1		Total (%)
	N	%	N	%	N	%	N	%	
Sex of Respondents									
Male	101	48.3	43	52.4	28	60.9	23	52.3	195(51.2)

Female	108	51.7	39	47.6	18	39.1	21	47.7	186(48.8)
									381(100)
Age (years)									
18-29	52	24.9	20	24.4	14	30.4	24	54.5	110(28.8)
30-40	85	40.7	34	41.5	17	37.0	9	20.5	145(38.1)
41-50	50	23.9	23	28.0	13	28.3	6	13.6	92(24.2)
51-60	15	7.2	4	4.9	2	4.3	5	11.4	26(6.8)
61 and above	7	3.3	1	1.2	-	-	-	-	8(2.1)
									381(100)
Marital Status									
Single	89	42.6	38	46.3	18	39.1	28	63.6	173(45.4)
Married	86	41.2	30	36.6	19	41.3	15	34.1	150(39.4)
Divorced	17	8.1	5	6.1	4	8.7	-	-	26(6.8)
Widowed	17	8.1	9	11.0	5	10.9	1	2.3	32(8.4)
									381(100)
Educational Qualification									
No Formal Education	41	19.6	22	26.8	6	13.0	-	-	69(18.1)
Primary	77	36.8	28	34.1	21	45.7	7	15.9	133(34.9)
Secondary	70	33.5	22	26.8	16	34.8	5	11.4	113(29.7)
Tertiary	21	10.0	10	12.2	3	6.5	32	72.7	66(17.3)
									381(100)
Primary Occupation									
Unemployed	49	23.4	15	18.3	16	34.8	6	13.6	86(22.8)
Professional	71	34.0	32	39.0	19	41.3	10	22.7	132(34.6)
Skilled/Managerial	51	24.4	20	24.4	7	15.2	4	9.1	82(21.5)
Manual/Partly Skilled	24	11.5	12	14.6	-	*	9	20.5	45(11.8)
Self-employed/Trading	10	4.8	1	1.2	3	6.5	12	27.3	26(6.8)
Student	3	1.4	2	2.4	1	2.2	3	6.8	9(2.3)
Others	1	.5	-	-	-	-	-	-	1(0.2)
									381(100)
Worshipping Years									
< 1year	42	20.1	11	13.4	8	17.4	13	29.5	74(19.4)
2-4years	63	30.1	26	31.7	18	39.1	17	38.6	124(32.5)
5-7years	53	25.4	12	14.6	7	15.2	8	18.2	80(21.0)
9-12years	33	15.8	22	26.8	4	8.7	3	6.8	62(16.3)
13years and more	18	8.6	11	13.4	9	19.6	3	6.8	41(10.8)
									381(100)
Official Position Held/Unit									
Pastor	7	3.3	5	6.1	3	6.5	1	2.3	16(4.2)
Minister	22	10.5	7	8.5	4	8.7	7	15.9	40(10.5)
Usher	77	36.8	30	36.6	9	19.6	11	25.0	127(33.3)
Protocol	60	28.7	18	22.0	12	26.1	10	22.7	100(26.3)
Welfare/Health	43	20.6	22	26.8	18	39.1	8	18.2	91(23.9)
Security	-	-	-	-	-	-	4	9.1	4(1.1)
Others	-	-	-	-	-	-	3	6.8	3(0.7)
									381(100)

Key: Full Life Christian Centre (FLCC), Living Faith Church (LFC), Salvation Ministries (SM), Christ Embassy Benin Zone 1 (CEB-Z1).

Knowledge of Emergency Response Preparedness

Table 2 presented the respondents' knowledge and awareness details about emergency response preparedness. On the statement "Emergency preparedness and response to disaster involve adequate plan to prevent an occurrence", 72.7% (277) of the respondents agreed that

the statement is acceptable for emergency preparedness and response while 8.4% (32) and 18.9% (72) of the respondents disagreed and “don’t know” respectively. On the level of preparation for emergency among the worship centres, 60.1% (229) of the respondents indicated that the centres are well prepared while 17.6% (67) and 22.3% (85) of the respondents indicated that worship centres are not prepared for emergency and “don’t know” respectively. The analysis indicated that 59.3% (226) of the respondents possess “very adequate” knowledge about various forms of emergencies, 24.9% (95) possess adequate knowledge while 11.8% (45) and 3.2 (12) possesses inadequate and “very inadequate” knowledge about various forms of emergencies respectively. From the study, 59.3% (226) of the respondents indicated that worship centres have committee/personnel for emergency purpose while 24.7% (94), 12.3% (47) and 3.7% (14) of the respondents indicated that the centres do not have, are not aware of such committee/personnel and that such committees/personnel existed in other forms respectively. Regarding the source of information, 16.5% (63) of the respondents indicated that their information was from the altar, 10.0% (38) indicated television and radio, 28.6% (109) indicated getting information from newspaper, 23.1% (88) indicated that their information was through lecture while 18.9% (72) and 2.9% (11) of the respondents indicated that their source of information about emergency was through personal experience and other sources respectively.

Awareness of Common Church Related Hazards

Table 3 presented the common church related hazards among the worship centres. From the analysis, 28.1% (107) of the respondents indicated to have witnessed one or more forms of hazard, 58.5% (223) of the respondents indicated not to have witnessed any form of hazard in recent time while 12.6% (48) of the respondents do not know about hazard events at the

How Prepared the Church

Well Prepared	105	50.2	54	65.9	37	80.4	33	75.0	229(60.1)
Not Prepared	43	20.6	13	15.9	4	8.7	7	15.9	67(17.6)
Don't Know	61	29.2	15	18.3	5	10.9	4	9.1	85(22.3)
									381(100)

Knowledge about Emergency

Very Adequate	131	62.7	42	51.2	26	56.5	30	68.2	229(60.1)
Adequate	45	21.5	24	29.3	14	30.4	12	27.3	95(24.9)
Inadequate	28	13.4	10	12.2	5	10.9	2	4.5	45(11.8)
Very Inadequate	5	2.4	6	7.3	1	2.2			12(3.2)
									381(100)

Personnel on Emergency

Yes	120	57.4	42	51.2	32	69.6	32	72.7	226(59.3)
No	51	24.4	24	29.3	10	21.7	9	20.5	94(24.7)
Don't Know	31	14.8	10	12.2	3	6.5	3	6.8	47(12.3)
Others	7	3.4	6	7.3	1	2.2			14(3.7)
									381(100)

Source of Information

From the Altar	25	12.0	11	13.4	16	34.8	11	25.0	63(16.5)
Television and Radio	22	10.5	5	6.1	2	4.3	9	20.5	38(10.0)
Newspaper	72	34.4	21	25.6	14	30.4	2	4.5	109(28.6)
Lecture	47	22.5	26	31.7	8	17.4	7	15.9	88(23.1)
Personal Experience	38	18.2	17	20.7	6	13.0	11	25.0	72(18.9)
Other	5	2.4	2	2.4	-	-	4	9.1	11(2.9)
									381(100)

Key: Full Life Christian Centre (FLCC), Living Faith Church (LFC), Salvation Ministries (SM), Christ Embassy Benin Zone 1 (CEB-Z1).

Table 4: Awareness of Common Church Related Hazards

Variables	FLCC		LFC		SM		CEB – Z1		Total (%)
	N	%	N	%	N	%	N	%	
Hazard Event in Recent Time									
Yes	42	20.1	24	29.3	26	56.5	15	34.1	107(28.1)
No	140	67.0	43	52.4	18	39.1	22	50.0	223(58.5)
Don't Know	27	12.9	15	18.3	1	2.2	5	11.4	48(12.6)
Others					1	2.2	2	4.5	3(0.8)
									381(100)

Most Common Emergencies at the Worship Centre

Fire Outbreak	5	2.4	1	1.2	-	-	3	6.8	9(2.4)
Stampeding	31	14.8	11	13.4					42(11.0)
Building Collapse	37	-			4	8.7	4	9.1	45(11.8)
Electrical Damage	118	56.5	44	53.7	21	45.7	21	47.7	204(53.5)
Car Accidents	-	17.7	25	30.5	14	30.4	8	18.2	47(12.3)
Communicable Disease	1	.5	-	-	-	-	-	-	1(0.3)
Flood	17	8.1	-	-	6	13.0	7	15.9	30(7.9)
Others	-	-	1	1.2	1	2.2	1	2.3	3(0.7)
									381(100)
Most Common Emergencies at other Worship Centre									
Fire Outbreak	14	6.7	6	7.3	1	2.2	3	6.8	24(6.3)
Stampeding	23	11.0	11	13.4	6	13.0	3	6.8	43(11.3)
Building Collapse	40	19.1	18	22.0	11	23.9	7	15.9	76(20.0)
Electrical Damage	94	45.0	32	39.0	8	17.4	17	38.6	151(39.6)
Car Accidents	10	4.8	12	14.6	13	28.3	5	11.4	40(10.5)
Communicable Disease	10	4.8	2	2.4	-	-	1	2.3	13(3.4)
Flood	1	.5	-	-	1	2.2	7	15.9	9(2.4)
Others	17	8.1	1	1.2	6	13.0	1	2.3	25(6.5)
									381(100)
Major Cause of Emergency									
Mechanical Failure	97	46.4	47	57.3	23	50.0	20	45.5	187(49.1)
Office/Cooking Equipment	18	8.6	1	1.2	-	-	2	4.5	21(5.5)
Uncontrolled Crowd	49	23.5	24	29.3	9	19.6	10	22.7	92(24.2)
Unprofessional Officials	41	19.6	8	9.8	10	21.7	8	18.2	67(17.6)
Others	4	1.9	2	2.4	4	8.7	4	9.1	14(3.6)
									381(100)
Respond to Emergency									
No	14	6.7	24	29.3	18	39.1	17	38.6	73(19.1)
Yes, as a Volunteer	93	44.5	49	59.8	22	47.8	20	45.5	184(48.3)
Yes, Official Responder	88	42.1	7	8.5	6	13.0	6	13.6	107(28.1)
Yes, Other	14	6.7	2	2.4	-	-	1	2.3	17(4.5)
									381(100)

Key: Full Life Christian Centre (FLCC), Living Faith Church (LFC), Salvation Ministries (SM), Christ Embassy Benin Zone 1 (CEB-Z1).

Discussion

The perception of emergency response preparedness among worshipers (congregants) of large worship centres in South-south region of Nigeria was assessed based on the knowledge and awareness of the phenomenon. The outcome revealed that many of the congregants agreed with the statement “Emergency preparedness and response to disaster involve

adequate plan to prevent an occurrence” as basic explanation of emergency response preparedness. The finding showed similar outcome with study conducted by Yemi-Jonathan et al. (2022) and Smith (2016) where local Churches showed their understanding towards disaster preparedness. Furthermore, the outcome indicated that the congregants perceived that their worship centres are well prepared for emergency event as they possess adequate knowledge about various events that can lead emergency and the centres have established committees/personnel designated for such event. The finding corroborated with that of Bronfman et al. (2019) which indicated the need for better preparation among people considering the level of exposure in the environment. Similarly, Danielle (2012) reported slightly more than half of the participants (religious communities) were prepared for a disaster with supplies, a disaster plan, or both. As individual, the congregants indicated that their source of information about emergencies through newspaper, lecture, personal experience, from the altar and television and radio in that order. The finding showed similarity with study of Yemi-Jonathan et al. (2022) which indicated similar sources of information regarding emergencies. According to Beckjord et al. (2008), risk communication plays a vital role prior, during and after emergencies and must be encouraged.

Considering the common church related hazards among the worship centres, the outcome revealed that electrical damage was the leading hazard while others include car accidents, building collapse, stampede, flood, fire outbreak, and pandemic and communicable disease. The finding indicated that the congregants have not witnessed hazard event in recent time and considered electrical damage as the common emergency event at their worship centre and other centres. Overall, the finding indicated that electrical damage and building collapse are the most common hazards related with worship centres in the study area. The outcome corroborated with finding of Van Coller and Akinloye (2021) and Onyanga-Omara (2016) which indicated religious-related building collapse has led to many deaths and injuries.

Fowode (2016) and Ogundele (2018) shared similar outcomes about collapses of religious buildings leading to many deaths and injuries, and they remain a typical emergency among churches in Nigeria. The finding indicated that mechanical failure, uncontrolled crowd, unprofessional officials and office/cooking equipment are major causes of emergency at worship centres. This outcome showed similarity to the finding of the study conducted by Yemi-Jonathan et al. (2022).

Conclusion and Recommendation

Emergency preparedness is a continuous process in which action, funding, partnerships and political commitment at all levels must be sustained. It relies on all stakeholders working together effectively to plan, invest in and implement priority actions. For many worship centres to improve their overall emergency management, every individual (congregants) must develop the required preparedness level which starts from improving the knowledge and awareness about the phenomenon. The study concluded that the respondents of the studied churches showed good knowledge and awareness about emergency response preparedness. It is therefore recommended the need for worship centres to develop a common, efficient, coordinated multi-sectoral approach, comprising all-hazard and hazard-specific measures that will ensure preparedness for all types of emergencies.

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