



## **Demographic Predictors Of Domestic Accident In Akuku-Toru Local Government Area Of Rivers State**

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### **ABSTRACT**

This study investigated the demographic predictors of domestic accident in Akuku-Toru Local Government Area of Rivers State. The descriptive research design was adopted for this study. The population of the study consisted of one hundred and sixty-one thousand, one hundred and three (161,103) individuals in Akuku-Toru Local Government Area. A sample size of 440 was determined using the Taro Yamane formula and a simple random sampling technique was used to select the respondents. Data was collected with a structured questionnaire and analysis was carried out using some statistical tools such as simple percentages, frequency count, and chi-square statistics at 0.05 alpha level. The findings of the study showed that age ( $X^2$ -value = 22.926, df = 2;  $p < 0.05$ ) and family size ( $X^2$ -value = 11.426, df = 3;  $p < 0.05$ ) has a significant influence on the occurrence of domestic accident while gender ( $X^2$ -value = 2.559, df = 1;  $p < 0.05$ ) has no significant influence on the occurrence of domestic accident. It was concluded that the demographic predictors of domestic accident in AKULGA were age, and family size. It was recommended that, Health educators and other health professionals should make a concerted effort to carry out a campaign against domestic accidents with the aim of enlightening the public on the preventive measure to minimize its occurrence.

**Keywords:** demographic predictors, domestic accident, Health educators

### **INTRODUCTION**

Domestic accident varies depending on demographic characteristics which accounts for such accidents such as age, gender, and education. Domestic accident occurs in a home or around surroundings. According to the World Health Organization (WHO, 2013), domestic accident is an unintentional event that occurs at home that results or could result in an injury. Domestic accident is potentially harmful, unexpected, unintended and abrupt occurrence at home which may or may not produce injuries, and which leads to medical consultation (Tursz, cited in Arulogun et al., 2013). The risk factors for domestic accident are enormous. Carlsson (2010) specified that, a greater proportion of domestic accident is caused by putting hand on a hot stove, a foot immersed in hot substance, a hand placed on a lighted lamp, and hot food. He added that, among children, these accidents occur mostly when they try to climb up to high height. Similarly, Arulogun et al. (2013) noted that the causes of domestic accidents include leaving unsafe equipment such as faulty electrical appliances without proper attention, keeping medications where children can have access to swallow them, allowing children to play unsupervised at home, poor maintenance of facilities in the home such as staircase without rails, and easy access to open fire.

However, the occurrence of domestic accident can be influenced by the various demographic characteristics. These features may be essential targets for sustainable domestic accident management and prevention programmes. Though children are particularly vulnerable and at risk, domestic accident can

affect all age groups. Age as a demographic factor highly influences the prevalence of domestic accident. For instance, the frequency of domestic accident among adults cannot be the same with that of children because, the adults can be more careful than the children. Amed (2013) stated that, at childhood, they are full of strength and can do anything without minding their age due to the quest to explore their environment. All these have brought the children into a very serious danger of domestic accident. Accident vary depending on age, falls are more common among children and elderly. Also, majority of mothers whose children were victims of domestic accidental fall were between age 25-31 years with majority working and schooling and does not have much time to care for children thereby exposing them to more harm of domestic accident. According to Sanusi (2018), pre-school children are more prone to domestic accident due to events such as playing with toys, running around the sitting room which exposes children to domestic accidents.

Gender is the state of being male or female. At young age, boys tend to experience domestic accident than females. According to the United Nations Economic, Social and Cultural Organization (UNESCO, 2018), at that stage of social and emotional growth and development of children, girls are careful while boys usually manifest restiveness which increases their chances of accident at the home. In the same vein, Hema (2016) revealed that, majority of injuries are more among male children than female, with 42% of injuries occurring in the hands which was the most common sites due to handling of sharp objects. Oladele and Olabanjo (2010) reported that, the incidence of burn injury was noted in females from Ibadan (South west Nigeria) with a female to male ratio of 2:1. However, during adulthood, both males and females are mature and can take care of themselves hence; there is a controversy as to which sex is more affected by domestic accident.

Domestic accident though not the leading health problem in Nigeria constitutes a major cause of morbidity, commonly encountered in rural clinics and casualty departments of major hospitals. Domestic accident can lead to deformation of the hand and shoulder due to fall from chair, mortality due to neglected electrical fault, and fatal injuries due to falls from slippery floor. Considering the dire consequences of domestic accident, it can no longer be disputed that, domestic accident is a public health problem which requires special and immediate attention. In spite of their magnitude and preventability, domestic accidents receive much less attention than other diseases. Also, there is dearth of information about domestic accident and the factors that influence its occurrence. However, many adverse consequences of injuries arising from domestic accident can be averted if the demographic factors influencing its occurrence and what actions to take are known. Hence, this study was aimed at investigating the influence of demographic factors in domestic accident, in the study area.

### **Research Questions**

The study provided answers to the following research questions:

4. What is the influence of age on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State?
5. What is the influence of gender on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State?
6. What is the influence of family size on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State?

### **Hypotheses**

The following null hypotheses were postulated to guide the study and were tested at 0.05 level of significance:

**Ho<sub>1</sub>:** The age of the respondents will have no significant influence on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State.

**Ho<sub>2</sub>:** The gender of the respondents will have no significant influence on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State.

**Ho<sub>3</sub>:** The family size of the respondents will have no significant influence on the occurrence of domestic accident in Akuku-Toru Local Government Area of Rivers State.

## METHODOLOGY

The research design adopted for this study is the descriptive survey design. Nwankwo (2016) defines descriptive research design as one in which the researcher collects data from a sample gotten from a large population and describe certain features of the sample as they are at the particular time of the study. This design was used for this study because the researcher collected data from a sample which represented the larger population and then analyze the data to arrive at a conclusion. The population for the study consisted of one hundred and sixty-one thousand, one hundred and three (161,103) individuals in Akuku-Toru Local Government Area of Rivers State as given by the National Population Commission (2010). A sample size of 440 was determined using the Taro Yamane formula:  $n = \frac{N}{1+N(e)^2}$  Where, n = sample size; N = population size; e = margin of error. Adding 10% attrition which is 39, n = 438, this was increased to 440 for uniformity in the stratification. Hence the sample size for this study was 440. A simple random sampling technique was used to select the sample.

The instrument for data collection was a structured questionnaire titled “Domestic Accident Questionnaire”. The instrument consisted of two sections A and B. Section A was focused on the demographic data of the respondents with a multiple response format, while section B was focused on the prevalence and forms of domestic accident experienced by the respondents with a yes or no response format. The validity of the instrument was established by the project supervisor and two other lecturers in the Department of Human Kinetics and Health education, Ignatius Ajuru University of Education. A reliability coefficient of 0.70 was obtained after subjecting the pretested questionnaires to statistical test using Kuder-Richardson 21. Data collection was done by a face to face delivery of the questionnaire to the respondents. Due to the limited time frame for the study, only few copies of the questionnaires were administered which were increased exponentially to the desired size. Data was systematically collected in a manner that provides answers to the research questions in a logical and coherent way. The data collected was analyzed using the statistical package for social sciences (SPSS) version 23.0. Data analysis was carried out using some statistical tools such as simple percentages, frequency count, and chi-square statistics at 0.05 alpha level.

## RESULTS

The results of the study are presented below in Table 1-4

**Table 1: Demographic Data of the Respondents**

Socio-demographic Data	Frequency (F)	Percentage (%)
<b>Age</b>		
15-24 years	117	28.1
25-34 years	157	37.6
35 years and above	143	34.3
<b>Total</b>	<b>417</b>	<b>100.0</b>
<b>Gender</b>		
Female	221	53.0
Male	196	47.0
<b>Total</b>	<b>417</b>	<b>100.0</b>
<b>Family size</b>		
2-4	195	46.8
5-7	13	3.1
8-10	65	15.6
11 and above	144	34.5
<b>Total</b>	<b>417</b>	<b>100.0</b>

Table 1 shows the demographic data of the respondents. The result shows that 117(28.1%) were aged 15-24 years, 157(37.6%) were aged 25-34 years while 143(34.3%) were aged 35 years and above. More than half 221(53.0%) while 196(47.0%) were males. The table also shows. 195(46.8%) had a family size of 2-4, 13(3.1%) 5-7, 65(15.6%) 8-10 while 144(34.5%) had a family size of 11 and above.

**Table 2: Summary of Chi-square test showing influence of age on the prevalence of domestic accident (DA) in Akuku-Toru Local Government Area**

Age	Ever had domestic accident		Total F(%)	df	X <sup>2</sup> - value	p- value	Decision
	Yes F(%)	No F(%)					
15-24 yrs	117(100)	0(0.0)	117(100)	2	22.926	.000	H <sub>0</sub> rejected
25-34 yrs	130(82.8)	27(17.2)	157(100)				
35 and above	130(90.9)	13(9.1)	143(100)				
Total	377(90.4)	40(9.6)	417(100)				

Table 2 shows the Chi-square test showing the influence of age on the prevalence of domestic accident in Akuku-Toru Local Government Area. The result shows that age has a significant influence on the prevalence of domestic accident ( $X^2$ -value = 22.926, df = 2;  $p < 0.05$ ). Therefore, the null hypothesis which states that there is no significant influence of age on the prevalence of domestic accident in Akuku-Toru Local Government Area was rejected and the alternate accepted.

**Table 3: Summary of Chi-square test showing influence of gender on the prevalence of domestic accident (DA) in Akuku-Toru Local Government Area**

Gender	Ever had domestic accident		Total F(%)	df	X <sup>2</sup> -value	p-value	Decision
	Yes F(%)	No F(%)					
Female	195(88.2)	26(11.8)	221(100)	1	2.559	.075	H <sub>0</sub> retained
Male	182(92.9)	14(7.1)	196(100)				
Total	377(90.4)	40(9.6)	417(100)				

Table 3 shows the Chi-square test showing the influence of gender on the prevalence of domestic accident in Akuku-Toru Local Government Area. The result shows that gender has no significant influence on the prevalence of domestic accident ( $X^2$ -value = 2.559, df = 1;  $p < 0.05$ ). Therefore, the null hypothesis which states that there is no significant influence of gender on the prevalence of domestic accident in Akuku-Toru Local Government Area was accepted.

**Table 4: Summary of Chi-square test showing influence of family size on the prevalence of domestic accident (DA) in Akuku-Toru Local Government Area**

Family size	Ever had DA		Total F(%)	df	X <sup>2</sup> - value	p- value	Decision
	Yes F(%)	No F(%)					
2-4	182(93.3)	13(6.7)	195(100)	3	11.426	.010	H <sub>0</sub> rejected
5-7	13(100)	0(0.0)	13(100)				
8-10	52(80.0)	13(0.0)	65(100)				
11 and above	130(90.3)	14(0.0)	144(100)				
Total	377(90.4)	40(9.6)	417(100)				

\*Significant.  $p < 0.05$

Table 4 shows the Chi-square test showing the influence of family size on the prevalence of domestic accident in Akuku-Toru Local Government Area. The result shows that family size has a significant influence on the prevalence of domestic accident ( $X^2$ -value = 11.426, df = 3;  $p < 0.05$ ). Therefore, the null

hypothesis which states that there is no significant influence of family size on the prevalence of domestic accident in Akuku-Toru Local Government Area was rejected and the alternate one accepted.

### **DISCUSSION OF FINDINGS**

The results showed that age has a significant influence on the prevalence of domestic accident ( $X^2$ -value = 22.926,  $df = 2$ ;  $p < 0.05$ ). The prevalence of domestic accident based on age showed that the younger ones compared to the older had more prevalence of domestic accident. This finding has concretized the fact that age as a demographic factor highly influences the prevalence of domestic accident as the frequency of domestic accident among adults cannot be the same with that of children because, the adults can be more careful than the children. Amed (2013) stated that, at childhood, they are full of strength and can do anything without minding their age due to the quest to explore their environment. All these have brought the children into a very serious danger of domestic accident. Accident varies depending on age, falls are more common among children and elderly. Also, majority of mothers whose children were victims of domestic accidental fall were between age 25-31 years with majority working and schooling and does not have much time to care for children thereby exposing them to more harm of domestic accident. The finding of this study is in consonance with that of Sanusi (2018), pre-school children are more prone to domestic accident due to events such as playing with toys, running around the sitting room which exposes children to domestic accidents than their adult counterparts.

The result shows that based on gender, domestic accident is prevalent more among males than the females. This finding can be explained with the assertion of United Nations Economic, Social and Cultural Organization (UNESCO, 2018), at the stage of social and emotional growth and development, females are careful while males usually manifest restiveness which increases their chances of accident at the home. The finding of this study is similar to that of Hema (2016) which revealed that, majority of injuries are more among male than female, which was due to handling of sharp objects. The finding of this study is at variance with that of Oladele and Olabanjo (2010) who reported that, the incidence of burn injury was noted in females from Ibadan (South west Nigeria) with a female to male ratio of 2:1. The result shows that gender has no significant influence on the prevalence of domestic accident ( $X^2$ -value = 2.559,  $df = 1$ ;  $p < 0.05$ ). This finding is in tandem with that of Oladele and Olabanjo (2010) who reported that, during adulthood, both males and females are mature and can take care of themselves hence; there is a controversy as to which sex is more affected by domestic accident.

The result showed that family size has a significant influence on the prevalence of domestic accident ( $X^2$ -value = 11.426,  $df = 3$ ;  $p < 0.05$ ). The size of the family in the home where an individual resides can also influence the occurrence of domestic accident. For instance, living in a small home with a large family size can make the home to be congested with properties and humans which can cause collision thereby increasing the chances of domestic accident occurrence because of inadequate space for play and other domestic activities. Particularly, in such a home, where children are allowed to play unsupervised, accident is bound to occur. This is even compounded when there are numerous properties including furniture in the home. The finding of this study corroborates that of Lima et al. (2014) which pointed out that, excessive furniture and sharp objects available at home are a major cause of accident in the home. This is worst when the family size is large but the house is small.

### **CONCLUSION**

Based on the findings of the study, it was concluded that the predictors of domestic accident in AKULGA were mainly the age of the individual and the family size.

### **RECOMMENDATIONS**

Based on the findings of the study, it was recommended that:

1. The community leaders should form a housing committee in the different communities to ensure houses are not built in such a way that makes room for congestion in the home.

2. Parents should ensure adequate monitoring and supervision of every activity going on in or around the home by both children and adult to ensure they are well guided to avoid the occurrence of accident.
3. Parents should also ensure that they give birth to and accommodate only the number of persons that is in commensurate with their house size to avoid home accidents due to furniture and other objects in the home.

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