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DESCRIPTIVE ANALYSIS OF ROAD TRAFFIC ACCIDENT IN NIGERIA (A CASE STUDY OF UGHELLI, A MAJOR TOWN IN DELTA

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Abstract

Descriptive analysis of Road Traffic Accident (RTA) in Nigeria (a case study of Ughelli, a major town in Delta state) was carried out due to the rate of accident and the resultant rate of death in Ughelli, these are of great concern over time hence the need to analyze the RTA data to have a better knowledge about the occurrences. Data of the FRSC Ughelli unit within the period of 2011-2022 were analyzed using descriptive statistic, charts and percentages. It was also discovered that the male gender got more involved in RTA more than the female gender with 34%. Within the analyzed period. RTA cases is at maximum in the year 2017 with 49 occurrences, followed by 2018 with 47 occurrences which is then followed by 2011 with 39 occurrences, RTA occurrences was seen to be at minimum in the year 2021 with 21 recorded occurrences. Death occurrences in RTA was seen to be at maximum in 2013 with 46 death cases recorded, death cases were seen to be at minimum in 2014 and 2016 with 27 recorded number of death in each year. In the monthly distribution of the RTA occurrences. It was seen that RTA occurred most in the month of December with a total of 56 cases, followed by January with a total of 43 occurrences

Keywords: ***Road Traffic Accidents (RTA), Accident, Federal Road Safety Corps (FRSC).***

INTRODUCTION.

6. Background of the Study.

Road traffic accident (RTA) is when a road vehicle collides with another vehicle, pedestrian, animal or geographical or architectural obstacle. It is usually involving with loss of property, injuries or even death. Archaeological society (2007) record of the world's first road traffic death involving a motor vehicle occurred on 31 August 1869. Irish scientist Mary Ward died when she fell out of her cousins' steam car and was run over by it. The rates of motor vehicle accident have been systematically extensively investigated in many parts of the world. Nigeria has become a regular phenomenon. Every day Nigerian die on the road and many injured, in such circumstances, the role of medical institutions become important as the first few minutes after the accident termed the “golden hour” are very precious and crucial. Many lives could be saved and disabilities prevented by providing immediate treatment to accident victims. There is no doubt about it; there are far too many accidents on the road today, even if you are the most careful and contentious driver on the road there is still a chance that someone will slam in your car causing you at the very least, some property damage and may something far worse. Road accident in Nigeria claim more lives daily than any other faster because of the multiple lapses in our system contribute to such road mishap, source of which are fatal in some cases” there is nothing you can do that will guarantee you a constantly safe and totally accident free driving experience but there are several things that travelers could do to help minimize the amount of accident that occur on the road every day. First obey the traffic law (as provided by the FRSC, Nigeria) that state makes prospective drivers pass a test before they get behind the wheel for a reason, automobiles can be very dangerous if they are not operated properly and according to the laws of the road.

(Atubi et al, 2009) Made it obvious that road accidents appear to occur regularly at some flash points such as where there are sharp bends, potholes and at bad sections of the highways, at such points over – speeding drivers usually find it difficult to control their vehicles, which then result to fatal traffic accidents, especially at night. According to (Atubi et al, 2012), Warri has many failed road network

systems. He further stated that the deplorable state of roads in the two major routes leading to Asaba, the Delta State capital now force motorists and other road users to take a long way around Benin in Edo State to get to Asaba. (Atubi et al, 2012), stated that many inner roads in the Oil city of Warri, Delta State, have become death traps, for example the Refinery – Effurun road and Enerhen – Udu road, this is a major cause of RTA in the locality.

It is believed that if an in-depth knowledge of these occurrences is known it will help to reduce the RTA occurrences as the road users will be law abiding (as provided by the FRSC in Nigeria) and the government will ensure proper conditions for safety in the road.

Study Area.

Ughelli North in Warri city, the largest Local Government Area of Delta State, Nigeria. Its headquarters are in the town of Ughelli. Coordinates: 9°45′N 8°43′E. it has an area of 818km^2 and a population of 320,687 where male population is 160,550 (50.1%) and female population is 160,137 (49.9%). (See National Population Commission of Nigeria 2006). Very close to Warri which is the oil city in Delta state, the city is owned by the Uhrobo ethnic nationals.

Reveal of Related Literatures

Different research work has been carried out by different researchers in the area of road accidents. Some of them have analyzed accident data in different ways. Some of them have developed accident models for forecasting future accident trends; some of them are to determine the degree of the effect caused by RTA. They have also proposed strategies for road safety

Bobai (2014) analysis titled ‘The Trend of Road Traffic Accidents in Nigeria’. Analysis of Nigeria RTA data from the period of 2007 to 2012 using descriptive statistic, tables, averages, graphs and percentages. The study observed that there has been declination in the casualty trend in Nigeria RTA, it was also discover that the trend and nature of road traffic crashes in Nigeria was on the increase with

serious and fatal crashes, which is about 79.7 percent fatality rate in Nigeria, and only 21.3 percent of the crashes were minor. It was also discovered that 159,086 persons were killed or injured in 47,036 accidents; this means that, on the average three persons were either killed or injured in every accident, In other words, every accident involved an injury or a death in Nigeria. This study also revealed that most accident prone states in Nigeria are Kaduna, Ogun, Kano, F.C.T. Abuja, Kogi, Edo, Oyo, Kastina, Niger, Ondo and Nasarawa. The study concludes that measures to reduce this trend should involve Governments effort and that of the citizens, as causes of these deaths in most cases are avoidable.

Analysis of reported cases of RTA in Umuaha metropolis conducted by Ekpenyoug (2015). This analysis was conducted due to the occurrences of RTA in Abia state that has been of great concern; data collection were from the State Traffic Office and were analyzed using descriptive statistics, the Friedman test, the Kruskal Wallis H test and the Chi-Square test for goodness of fit and independence. It was discovered that majority of the road accident are caused by human factors like over speeding, reckless driving, drinking and driving, drug abuse, arrogance and illiteracy, it was also seen that number of reported cases of road accident is not uniformly distributed across the years and vehicle types, and casualties in road accident on the vehicle type involved.

Road Traffic Accidents and Bone Fractures in Ughelli, Nigeria. analysis conducted by Odokuma, (2015). The study was aimed at determining the pattern of bone fractures in Ughelli metropolis and to improve the management of Orthopedic cases, the study used data of born fracture recorded at the Celian Clinic, Ughelli, between July 2013 and July 2014, showing relevant clinical information including age and gender of patients, were presented in frequencies, two hundred and sixteen bone fracture cases were reviewed. The fractures were observed to have occurred more in males than in females, and in their 3rd and 4th decades of life also majority of the fractures were observed in the femur, and least in the patella. Road traffic accidents (RTA) were observed to be the leading cause of bone fractures.

The publication titled The Pathfinder a transport Digest from the department of Policy, Research and Statistics (2014), Federal Road Safety Corps National headquarters, Abuja. Road Traffic Crash data recorded along the 18 Operational Corridors of FRSC in Nigeria and around the 6 World Bank designated Corridors were brought to light especially for the period 2010-2013. Data were collected on Road Traffic Crashes (RTC), human population, vehicle population, road length and offences committed by road users from 2006 to 2013, multivariate analysis was carried out with the use of multiple regressions. Also, table and charts were used to show clearly the trends followed by the independent variables. The aim of the research is to appraise the use of the Emergency Number 122. From the digest it was seen that total RTC decreased by 46% from 354 in 2010 to 191 in 2013 along Benin-Sapele-Warri-Ughelli-Sagbama-ahoada. However, a 16% increase was recorded in 2012 over 2011 figure. The traffic volume has also increased over the years with 15% increase in 2013 over 2010 figure. Number killed is progressively increasing from 87 in 2010 to 171 in 2013. Notably, Benin-Sapele-Warri-Ughelli end of the road is dualised and very motorable. While, the Ughelli-sagbama-Ahoada end of the road is undergoing extensive construction. The high fatality along this Corridor needs to be investigated to know the section of the road involved and probable cause of RTC for any meaningful intervention.

Effects of Road Traffic Accidents

Road traffic accidents in 2020 had devastating consequences, including human deaths and injuries, as well as significant economic and social impact. The effect extends beyond immediate casualties, impacting health care systems, productivity and family structures

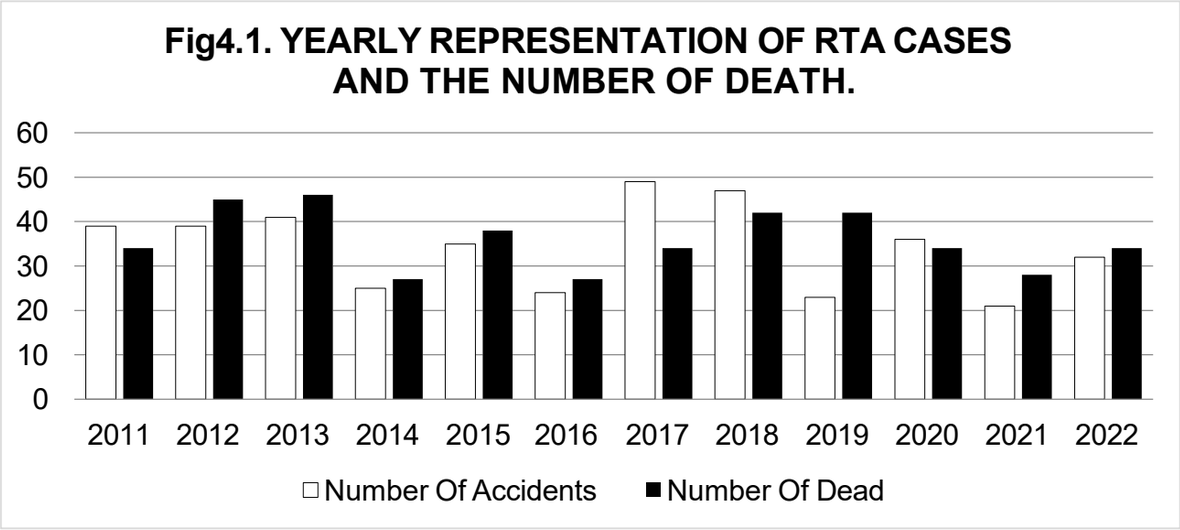
Method of Data Analysis.

This is the method used for eliciting data, and the data were summarized using descriptive statistic, tables, averages, graphs and percentages.

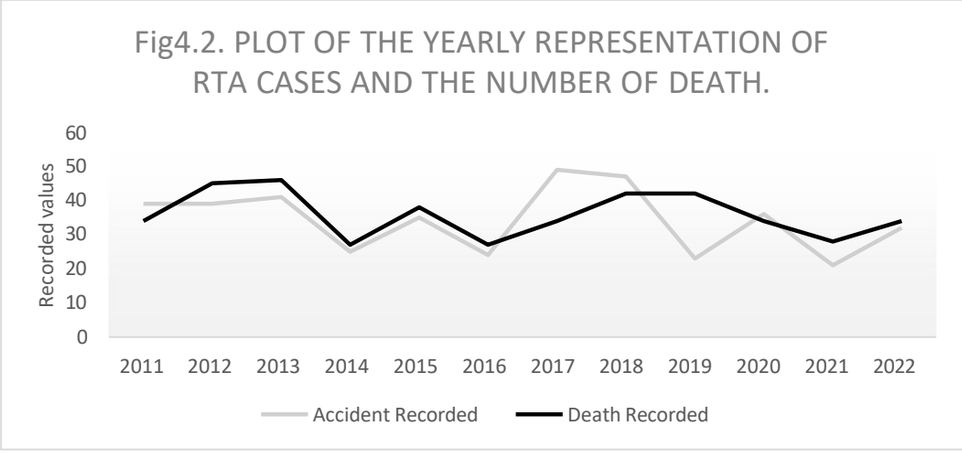
RESULTS

4.1. **Yearly representation of RTA cases and the number of death.**

In this we present the summary of the data of the RTAs and the number of deaths using Bar chart in fig4.1. While fig4.2 presents the plot of the yearly representation of RTA cases and the number of death



4.2. **Presentation of the plot of the yearly representation of RTA cases and the number of death.**



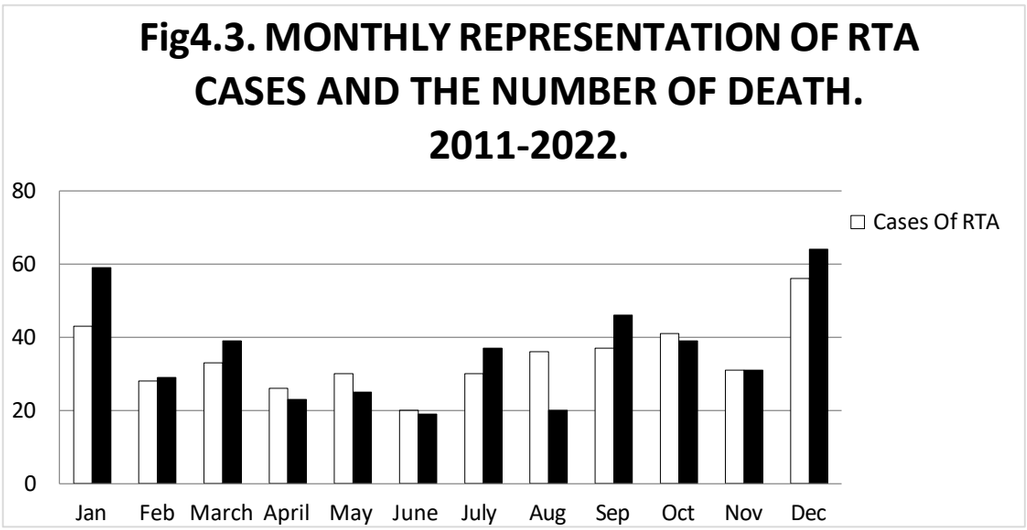
INTERPRETATION.

From Fig4.1 and Fig4.2. It can be concluded that RTA cases is at maximum in the year 2017 with 49 occurrences, followed by 2018 with 47 occurrences which is followed by 2011 and 2012 with 39 occurrences in each year. RTA occurrences was minimum in the year 2021 with 21 recorded

occurrences. It can also be concluded that death occurred must in the year 2013 with 46 number of death recorded followed by 2012 with 45 recorded cases, then followed by 2018 and 2019 with 42 recorded number of death each, it is minimum in 2014 and 2016 with 27 recorded number of death each.

4.3. **Monthly representation of RTA cases and the number of death.**

In these we present the monthly summary of the RTAs and the monthly summary of death involved using the bar chart in fig4.3. This is done in order to understand the monthly pattern of the RTA occurrences and the monthly number of death.



INTERPRETATION.

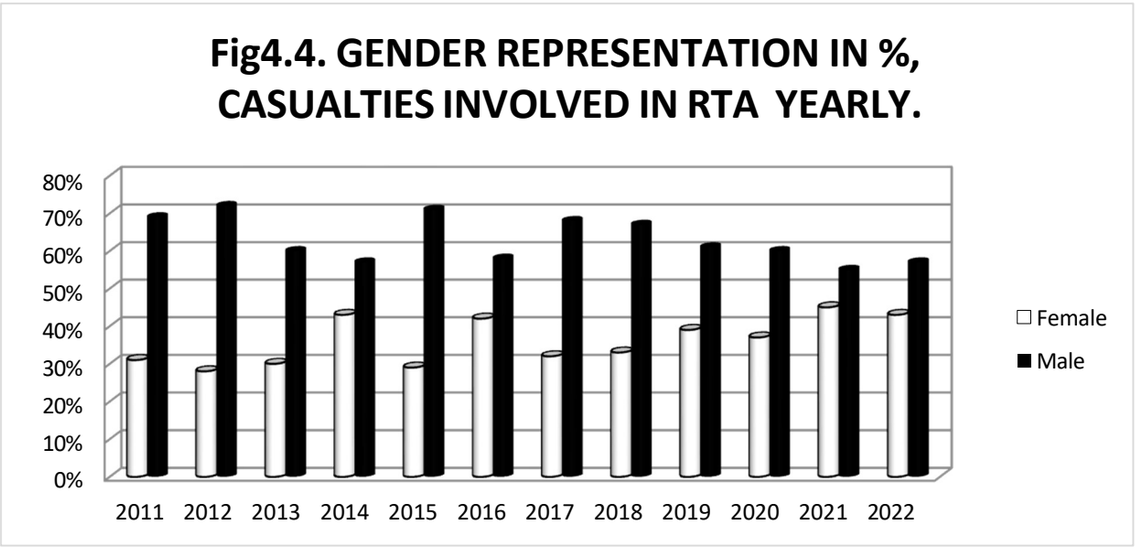
From the above Bar chart (fig4.3), it can be concluded that RTA cases occurred most in the month of December with a total of 56 cases, followed by January with a total of 43 occurrences. It can also be concluded that RTA cases is at minimum in the month of June with 20 cases of occurrences within the analyzed period.

It can also be seen that death occurred most in the month of December with 64 cases recorded within the analyzed period followed by January with 59 dead casualties recorded within the analyzed period,

also dead occurrences is minimum in the month of June and June with 19 death involved in each of the months.

4.4. ***Gender representation in %, casualties involved in RTAs yearly.***

In this we present the yearly summary in percent of the genders (female and male) that got involved in RTA within the analyzed period as shown in fig 4.4. While in fig4.5 we present the general overview of the gender involved in RTA.



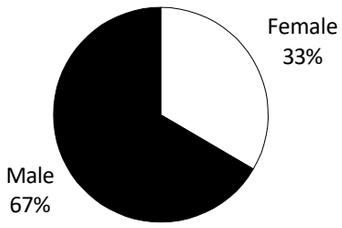
INTERPRETATION.

It can be concluded from the above bar chart (in fig4.4) that the male gender gets involved in RTA more than the female gender yearly.

4.5. **Presentation of the general overview of the gender involved in RTA.**

As earlier stated here we present the overall gender distribution involved in RTA.

fig4.5. OVERALL REPRESENTATION OF GENDERS INVOLVED IN RTA OVER THE ANALYZED PERIOD.



INTERPRETATION.

From fig4.5 charts it can be concluded that Male gets involved in RTA more than the Female gender with the difference of 34% within the analyzed period. This is probably due to reckless driving of the drivers; drunkenness and failure to obey the traffic laws as the male gender tend to be more careless on the road compared to the female.

SUMMARY AND DISCUSSION

The data used are secondary data collected from the FRSC, the duration of the data is from 2011-2022. The total of 411 RTA were reported within these period and they were analyzed, it was discovered that a total of 2275 people got involved into RTA within the analyzed period, in these occurrences, 1514 (67%) are male and 761 (33%) are females; hence the male gender got involved more than the female gender with the difference of 34% within the analyzed period. This is probably due to human factors of the causes of RTA such as reckless driving, drunkenness and failure to obey the traffic laws as the male gender tend to be more careless on the road compared to the male.

RTA was seen to be highest in 2017 with 49 number of occurrences followed by 2018 with 47 number of occurrences then followed by 2011 with 39 number of occurrences. It is least in 2022 with 21 number of occurrences followed by 2019 with 23 number of occurrences then followed by 2016 with 24 number of occurrences.

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