

Interventions for Preventing Deaths and Injuries from Road Traffic Crashes: ‘A Silent Epidemic on Wheels’ in Nigeria

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Abstract

Road traffic crashes (RTC's) are among the eight leading causes of deaths globally. Strategies and policies have been put in place by many countries to reduce; RTC's and to prevent RTC's and related injuries/deaths. Annually, Nigeria loses about 3% of its GDP to road traffic crashes. Several efforts have been made in Nigeria as a member of the global community to tackle the road menace. This paper examines interventions for preventing deaths and injuries from road traffic crashes in Nigeria. Road traffic crashes are predictable and can be prevented. Many countries have shown sharp reduction in the number of crashes and casualties by taking actions including: Raising awareness of legislating and enforcing laws governing speed limits, alcohol impairment, seat-belt use, child restraints and safety helmets; formulating and implementing transport and land-use policies that promote safer and more efficient trips, encouraging the use of safer modes of travel such as public transport and incorporating injury prevention measures into traffic management and road design; making vehicles more protective and visible for occupants, pedestrians and cyclists, using daytime running lights, high – mounted brake lights and reflective materials on cycles, carts and use of non-motorized forms of transport.

Keywords: Interventions, Deaths and Injuries, Crashes, Traffic, Silent Epidemic, Prevention, Nigeria.

Introduction

There are various harmful factors that threaten human health ([Khonsakhlagh et al, 2022, 2023](#)). Traffic collisions pose a significant risk to global health, with approximately 1.19 million fatalities annually due to road – related injuries or disabilities for an estimated 20 to 50 million individuals ([WHO, 2023](#); [Atubi, 2024d](#)). Without effective interventions to address road safety, it is anticipated that deaths will continue to rise. Moreover, vehicular crashes rank as the ninth most common cause of mortality across all age groups on a global scale and are expected to become the seventh leading cause of death by the year 2030, according to research by [Bendak et al \(2022\)](#) and [Atubi \(2022c, 2022d and 2022e\)](#).

Around the world, someone dies from a road accident every 25 seconds. The head of the United Nations road safety fund has called road deaths and injuries a “silent epidemic on wheels” ([Rennie, 2022](#)). He has studied cities and urban policy for many years, including transportation and road safety. In [Atubi \(2024d\)](#), making transportation systems safer is feasible in Nigeria and it is not rocket science. The key is for government to prioritize safer roads, speeds and vehicles, and to promote policies such as traffic calming that are known to reduce the risk of crashes.

Crashes cause serious economic harm to victims and their families; as well as to the broader society. A 2019 study estimated that between 2015 and 2030, road injuries will cost the global economy almost \$1.8

trillion (WHO, 2023). Because death and injuries are highest in low-and middle-income countries, dangerous roads add to the costs of being poor and are a major inhibitor of economic growth. That is why one of the UN's sustainable development goals is to halve number of global deaths and injuries from traffic incidents by 2030. To reach this target, it is critical to understand the main contributing factors. Finding the cause and determining the important factors affecting traffic crashes and determining their role can be a suitable basis for providing solutions aimed at preventing and reducing traffic crashes. Action is needed from the relevant institutions such as the Ministry of Transport and the Federal Road Safety Commission (FRSC). In general, the main factors affecting traffic crashes are connected to each other in a chain that can be divided into four groups; road (geometry, traffic flow), vehicle (capability, road worthiness) human factors (driver characteristics, behaviour, physiological and psychological abilities) and the environment (atmospheric condition) (Atubi, 2023c, 2023b, 2023a, 2022a).

There is extensive literature on human factors characteristics; research shows that gender is an important factor with males overrepresented in crashes, accounting for over (82%) of the injured, compared to female (18%) in Nigeria (Atubi, 2023e). Age is another important factor. The WHO classification divides the age of injured road users into four groups: children up to 12 years old; youth 15-17 years; adults 18-59 years and elderly 60 years and older (WHO, 2009). Crash trauma is more frequent in youths and adults accounting for the majority of injured road users (73%) (Victorino et al, 2003; Zhang et al, 1998).

With a total road network of 194,394km, Nigeria has the largest road network in sub-Saharan African. The majority of these roads were built years ago when vehicular traffic was limited and alternate modes of transit, such as trains, were available. However, the rise in automobile traffic has not been matched by an increase in road development at a comparable rate. With defunct rail transport and waterways as alternative modes of transportation, the load in roads have increased as a result of rising motorization. The outcome is a breakdown of roads, an increase in insecurity, especially on rail transport and a rise in the number of road accidents (Atubi 2021a, Atubi 2021d and Atubi 2022e).

Nigeria lost a total of 1,834 lives to road traffic crashes between January and March 2022 with Lagos State leading all other states of the federation. Male adults accounted for 77.8% of this figure, while female adults were 15.2%. More female children were killed than male children. By way of comparison, 1,652 lives were lost to road crashes between October and December, 2021, while 1,834 lives were lost between January and March 2022 – indicating an 11.02% increase in lives lost to road traffic accidents in the succeeding quarter. And the number of lives lost to road crashes in the January to March 2022 period is higher than those of every quarter of 2021. From then, more than 11,800 road traffic casualties that occurred in Nigeria during the fourth quarter of 2021, about 10,200 were injured while 1,700 were registered deaths (Nigeria customs, 2022). Nigeria loses about 80 billion naira annually to road accidents of all subjects that are involved in road traffic crashes in Nigeria, 29.1 percent suffer disability and 13.5 percent are unable to return to work (Atubi 2012a). Road traffic crashes statistics in Nigeria reveal a serious and growing problem with absolute fatality rate and casualty figures rising rapidly. Ironically, in Nigeria, studies have indicated that better facilities in terms of good quality and standardized roads have been accompanied by increasing number of accidents (Atubi, 2022). This is totally contrary to the trends in countries where even the level of sophisticated road network and volume of vehicular traffic are much higher (Atubi and Onokala, 2009).

The WHO indicates that RTIs cause considerable economic losses to victims, their families, and nations. These losses arise from the cost of treatment (including rehabilitation and incident investigation) as well as reduced/lost productivity (e.g. in wages) for those killed or disabled by their injuries as well as family members who need to take time off work (or school) to care for the injured. Road traffic deaths and injuries are a major but neglected public health challenge that requires concerted efforts for effectiveness and sustainability (Nantulya & Reich, 2003).

Many countries have put forward strategies and policies to curb RTCs to help prevent deaths and injuries. For example, Nigeria in 1988 established the Federal Road Safety commission to curb the numerous number of deaths and injuries from road traffic crashes, the vision on sustainable safety was developed in 1992 in the Netherlands. In March 2000, the government of the United Kingdom set out its strategies for improving road safety over the next decade in Tomorrow's roads; safer for everyone. More recently, in March 2010 the United Nations General Assembly resolution 64/255 proclaimed a decade of action for road safety 2011 – 2020 and 2021-2030 intending to stabilize and then reduce the number of crashed level of road traffic fatalities around the world by increasing activities conducted at national, regional and global level (Recioppi et al, 2004; WHO, 2022).

With the burden of RTCs occurring in low – and middle – income countries (LMICs) and Nigeria, the Bloomberg initiative for global road safety (BIGRS) 2015-2019 program is a recent initiative implemented in some LMICs. The programme seeks to reduce fatalities and injuries from road traffic crashes in Nigeria and LMICs by strengthening road safety legislation at the national level and implementing proven road safety interventions at all levels (Larson et al, 2016).

Study Area

Nigeria is located in West Africa and occupies an area of about 924,000km². The last official census figure in 2006 put the population at 140,003,542 while current estimated population is 228,408,983 ([Worldometer, 2024](#)). The ICRC (2024) reported that the country has about 195,000km road network out of which only about 60,000km is paved. As at the fourth quarter of 2022, the estimated total vehicle population in Nigeria was 15,434,721 with vehicle per population ratio at 0.08 (see [Figure 1](#)).

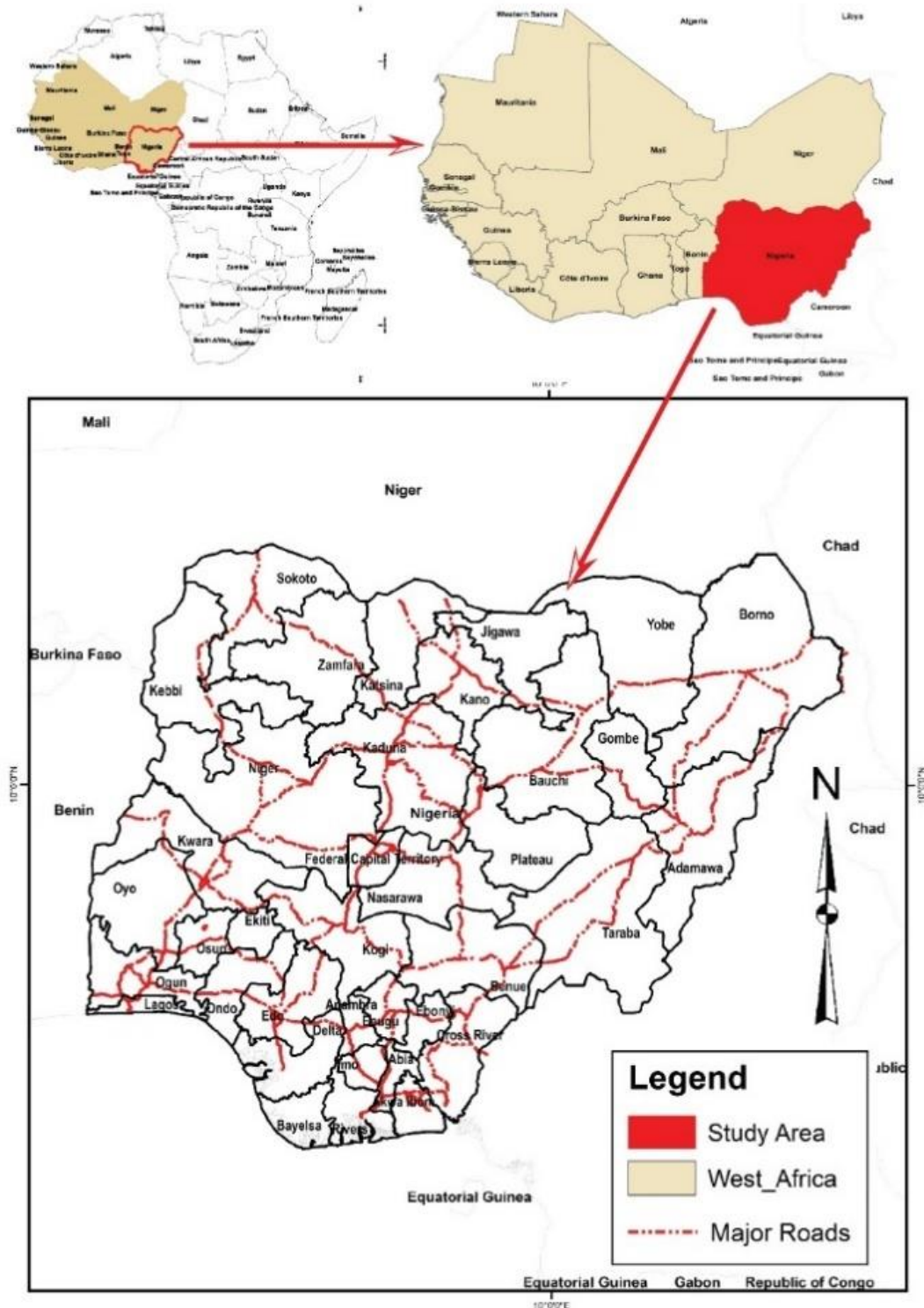


Figure 1. Map of Nigeria

Nigeria is the seventh most populous country in the world and is projected to become the third most populous by 2050. The number of motor vehicles in use is estimated to have grown by 33% over a recent ten year period and a growing proportion of motorcycles means their involvement in road traffic crashes is growing disproportionately to 21.5% in 2023.

Current Road Safety Status in Nigeria

According to government statistics, there were 5483 reported fatalities and 41,464 reported casualties as a result of road traffic crashes in Nigeria in 2019. It is important to know that not all road traffic fatalities and injuries are being reported through FRSC; the WHO estimates that around seven times more fatalities are occurring and that the number of fatalities continues to increase; and the FRSC has taken and is taking regular steps to improve the quality and quantity of road crash and injury data in Nigeria (World Bank, 2019; FRSC, 2017).

Two examples of the efforts made to improve data merit particular attention. A national Committee on crash information system was established, composed of representatives of the FRSC, Nigeria police, Ministry of health, National Population Commission and Bureau of Statistics (being the agencies responsible for the collection, collation and analysis of road crash data) to provide multi-sectorial governance for the National crash data management system. Most recently, FRSC personnel have been deployed to 664 Local Government Areas (LGAs) in Nigeria (out of 774 LGAs) to focus on improving road crash data collection.

The high level of concern about the issue is reflected in other estimates and analyses. For example, the global burden of disease study estimates that in 2017 road traffic injury is the 15th highest cause of death and disability in Nigeria, the 10th highest cause of disability for 5-14 year old children and the 7th highest cause of death for 15-49 year old adults (Institute for health metrics and evaluation, 2020). Using a well-established methodology, the world bank estimates socio-economic cost of crashes to Nigeria of USD 29 billion in 2016 alone (over 7 percent of Nigeria's 2016 Gross Domestic product) (World Bank, 2019).

Nigeria's road traffic system is under extreme pressure. Significant additional effort is required each year to get the safety problem under control and begin the process of eliminating fatal and serious injury over time. A major strategic achievement in 2020 was the approval of a second Nigeria Road Safety Strategies (NRSS II) 2021-2030. The strategy has a vision of a country where road traffic crashes result in zero fatalities" and an overall goal of a 50% reduction in road traffic fatalities by 2030 (2019 baseline).

The strategies sets out a series of stakeholder actions, and a proposed budget. A notable headline feature is identification of three critical factors for successful implementation;

- Continued support for NRSS II by political leaders
- Budgetary allocation for the technical working group of the NaRSAC and
- State road safety advisory councils comprising stakeholders to drive the execution of the NRSS II at state level.

Table 1. Nigerian Progress Against UN versus voluntary Road Safety Targets

UN Voluntary Road Safety Targets	Nigeria Progress
All countries establish a comprehensive multi sectorial national road safety action plan with time – bound targets.	Achieved with new national road safety strategy to 2030 recently approved (a)
All new roads achieve technical standards for all road users that consider road safety, or meet a three star rating or better.	Significant improvement required, kick started with an IRAP programme which is backed by an interim 5 year investment programme to demonstrate scope for possible transformation (a small rating exercise has been conducted (D))
All countries accede to one or more of the core road safety – related UN legal instruments.	Significant Africa – leading progress (b)
More than 75% of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety	Same as above
100% of new (defined as produced sold or imported) and used vehicles meet high quality safety standards such as the recommended priority UN regulations, global technical regulations or equivalent recognised national performance requirements	Significant Africa leading progress, which will benefit from upcoming review of regulatory system (c)
Halve the proportion of vehicles travelling over the posted speed limit, and achieve a reduction in speed related injuries and fatalities	These are yet to be measure – there is significant non-compliance with helmet and seat belt use, and speed and alcohol enforcement will require significant new and ongoing equipment and systems

UN Voluntary Road Safety Targets	Nigeria Progress
Increase the proportion of motorcycle riders correctly using standard helmets to close to 100% Increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100% Halve the number of road traffic injuries and fatalities related to drivers using alcohol and/or achieve a reduction in those related to other psychoactive substances	investment (E)
All countries have national laws to restrict or prohibit the use of mobile phones while driving	Achieved and being enforced, with significant non – compliance (F)
All countries to enact regulation for driving time and rest periods for professional drivers and/or accede to international regional regulation in this area	The road transport safety standardization scheme is an excellent platform to improve the safety of commercial transport (G)
All countries establish and achieve national targets in order to minimize the time interval between road traffic crash and the provision of first professional emergency care	This is yet to be measured, but professional systems are in place that would respond to increase investment (H)

Legend

Achieved/significant progress (A, B and C)

Moderate achievement (D and E)

Insufficient progress (F, G and H)

The strategy is aligned with the United Nations Sustainable Development Goals. Under this umbrella, member countries agreed a number of voluntary road safety targets which are set out in Table 1, with a snapshot summary statement relating to its status in Nigeria. They provide an excellent platform for Nigeria to develop a strong results management framework, focusing on the vital few issues, and pursuing them with vigour, to achieve the country's road safety goals.

Strategies for Investigating Accidents

Investigating road traffic accidents involves a structured process focusing on gathering evidence, determining the cause, and identifying contributing factors. Key strategies include scene assessment, data collection, forensic analysis, and root cause analysis.

Automobile accidents are one of the leading causes of death worldwide. Road traffic accident rates and fatality rates in the industrialized countries have tended to exhibit pronounced decreasing time trends. Some scholars like [Oppe \(1991\)](#) and [Albaresi et al, \(2023\)](#) interpret the downward trend as evidence of experimental learning. While others like [Achini et al, \(2022\)](#), [Dyreborg et al \(2022\)](#), [Fisa et al \(2022\)](#) and [Broughton \(1999\)](#) treat it as a nuisance parameter that happens to be established for model fitting. A motor vehicle traffic injury (MVTI) is an important public problem in both developed ([Bakers et al, 1992](#); [Graham, 1993](#)) and developing countries ([Smith and Barss, 1991](#), [Berger and Mohan, 1996](#), [Atubi and Onokala, 2009](#); [Atubi 2024d](#)). When designing a relevant MVTI control program, the first two questions that should be asked are 'who' are at the highest risk, and 'where' MVTI are most likely to occur. Regional MVTI mortality data are the statistics commonly used by health authorities to answer these questions ([Bjaras 1993](#)).

Regional MVTI mortality rates calculated according to the place – or – occurrence might have different meaning from those calculated according to the place – to – residence: the former reflects area – specific environmental risk factors for MVTI ([Cummings et al, 1995](#)). The two calculations have different implications for prevention programmes. While many scholars have pointed out that the problem of using place – of – residence in calculating regional MVTI mortality rates ([Bangdiwala et al, 1985](#), [Robertson 1992](#), [Gooder and Charny, 2006](#)), only two studies provided empirical data to illustrate the implication ([Baker et al, 1987](#); [Gooder and Charny, 2006](#)). However, experience from other countries show that small roundabouts were an effective speed reducing measure ([Ugan et al, 2022](#)). He also concluded that small roundabouts increased safety. Minnen (1992) reported that new round about reduce the total number of accidents by 50% and the number of casualties by 80%. He also showed that small round about normally have the lowest accident rate of all types of one-level junctions, but he found a tendency towards problems for two – wheeled vehicles.

While traffic related injuries take a very large toll in almost every country around the world particularly in developing countries or less industrialised countries, significant progress towards presentation and control has been limited to high income and/or highly industrialised countries ([WHO, 2024](#); [Leonhardt, 2023](#); [Annual](#)

[International Road Safety comparisons, 2022](#)). Much of the progress in developed countries is attributed to the combination of interventions, strategies and policies that have been developed mainly in the developed countries settings over the past few decades. Such factors as high health budgets, adequate number of researchers, high levels of health and safety awareness and clear universal literacy, have also catalysed this progress ([Sukhai et al, 2021](#); [Onate-Vega et al, 2020](#)).

Reducing road traffic accident is truly a global challenge and succeeding will require the involvement of multiple stakeholders at the global, national and community levels ([Atubi, 2024](#), [Atubi 2023c](#)).

In the early 1980's, a survey of road traffic accident information systems in use in developing countries indicated that only 15 percent of the countries had adequate accident report forms and none had computer analyses facilities. Therefore, to help countries improve their accident investigation and research capability, the overseas unit developed its Microcomputer accident analysis package (MAAP), initially in collaboration with the traffic police in Egypt, ([Hills and Elliot, 1986](#)). However, in 2004, it is now in use in over twelve countries. It is the nationally adopted system for Botswana and Papua, New Guinea and regionally adopted in most of the other countries; major cities in which MAAP is established include Bandung, Beijing, Karachi and Islamabad. The language that MAAP operates in include Arabic, Chinese, French, English and Spanish ([Jacobs et al, 2004](#)).

Social and Economic Impact of Deaths and Injuries from Road Traffic Crashes

Road traffic accidents have significant social and economic consequences, including physical injuries, mental health impacts, financial strain, and reduce productivity. The global economic cost of road accidents is substantial, and these incidents disproportionately affect vulnerable populations and developing countries.

RTAs impose a substantial burden on public health and the economy, affecting individuals, families, and communities nationwide. The urgent need to address road safety is underscored by Nigeria's rapid urbanisation and motorization, which exacerbate road congestion and accident risks ([Atubi, 2021a, 2021d, 2022a](#); [Obinowu, 2023](#)). The socioeconomic impact of RTAs is particularly severe for low – income drivers; who were disproportionately affected by poor vehicle conditions and lack of access to formal driver training ([Usman and Adebosin, 2024](#); [Atubi, 2022c](#)). International research has shown that socioeconomic status, drivers' behaviour, and education are key determinants of RTA risk. In various contexts, studies indicate that improved education and awareness programmes significantly correlate with safer driving practice. Similar patterns observed in countries like India and Ethiopia, where low socioeconomic status correlates with higher accident rates, emphasize the need for targeted interventions ([Musselwhite, 2020](#); [Bazillinsky et al, 2018](#); [Getachew et al, 2024](#)).

Indeed, a World Bank study has shown that Nigeria experiences a significant number of road traffic fatalities each year with estimates ranging from over 39,000 to 40,000 deaths annually. Road traffic accidents in Nigeria have significant social and economic impacts. These impacts include increased poverty, reduce productivity, and loss of human capital, ultimately hindering economic growth ([World Bank, 2024](#); [Atubi, 2024d](#)). [The World Bank \(2024\)](#), also noted that poor communities are at a higher risk of serious road traffic injuries and that accidents can push households into poverty. It is estimated that road traffic accidents cost the global economy billions of dollars annually with a significant portion of that occurring in developing countries like Nigeria. Accurate epidemiological data from many of the developing countries are difficult to find in the literature ([Van et al, 2006](#)).

Hospital logs or police records from which data on accident injuries could be sourced under estimate the total burden of the injuries. Besides, despite the importance of injury as a public health problem, few studies have been concerned with the economic and social imports. This is due to many factors most of which are related to availability of reliable data ([Afukaar et al, 2003](#); [Bhavan 2019](#); [Byaryhanga and Evdorides 2021](#); [Chen et al, 2019](#); [Tandrayen-Ragoobor, 2025](#); [Atubi 2020c](#); [Atubi 2021d](#)).

In Nigeria, road traffic crashes have become one of leading causes of death in older children and economically active adults between the ages of 30 and 49 years ([Akinyemi, 2019](#); [Ayodeji et al, 2021](#)). Despite this burgeoning problem, little attention has been paid to road traffic injury prevention and treatment in Nigeria and most developing countries [Tandrayen-Ragoobour \(2025\)](#) and [Atubi \(2024d\)](#) reported that gross under estimation of road traffic accident injuries and fatalities in Nigeria could be due to a lack of sufficient data collection by government agencies. The socio-economic cost of road traffic accidents and injuries in Nigeria are immense. The direct cost of traffic casualties can perhaps best be understood in terms of the labour lost to the nation's economy which consequently results in low productivity. Road traffic accidents and injuries have significantly retarded Nigeria's socio-economic aspirations and development due to the premature loss of qualified and potential contributing professionals and able-bodied men and women in the labour force ([Yusuf, 2015](#); [Usman and Adebosin, 2024](#)).

The Nigerian Model for Road Safety and Interventions Programme

This analysis of Nigeria's single organisational model for road safety was undertaken within a perspective of road safety which was codified in guidelines prepared by the Global Road Safety Forum ([GRSF](#)) in 2009 (and

revised in 2013). The road safety management framework (See [figure 2](#)) which underpinned the guidelines addressed road safety as a production process with three interrelated elements: institutional management functions, which generate interventions which, in turn, produce results.

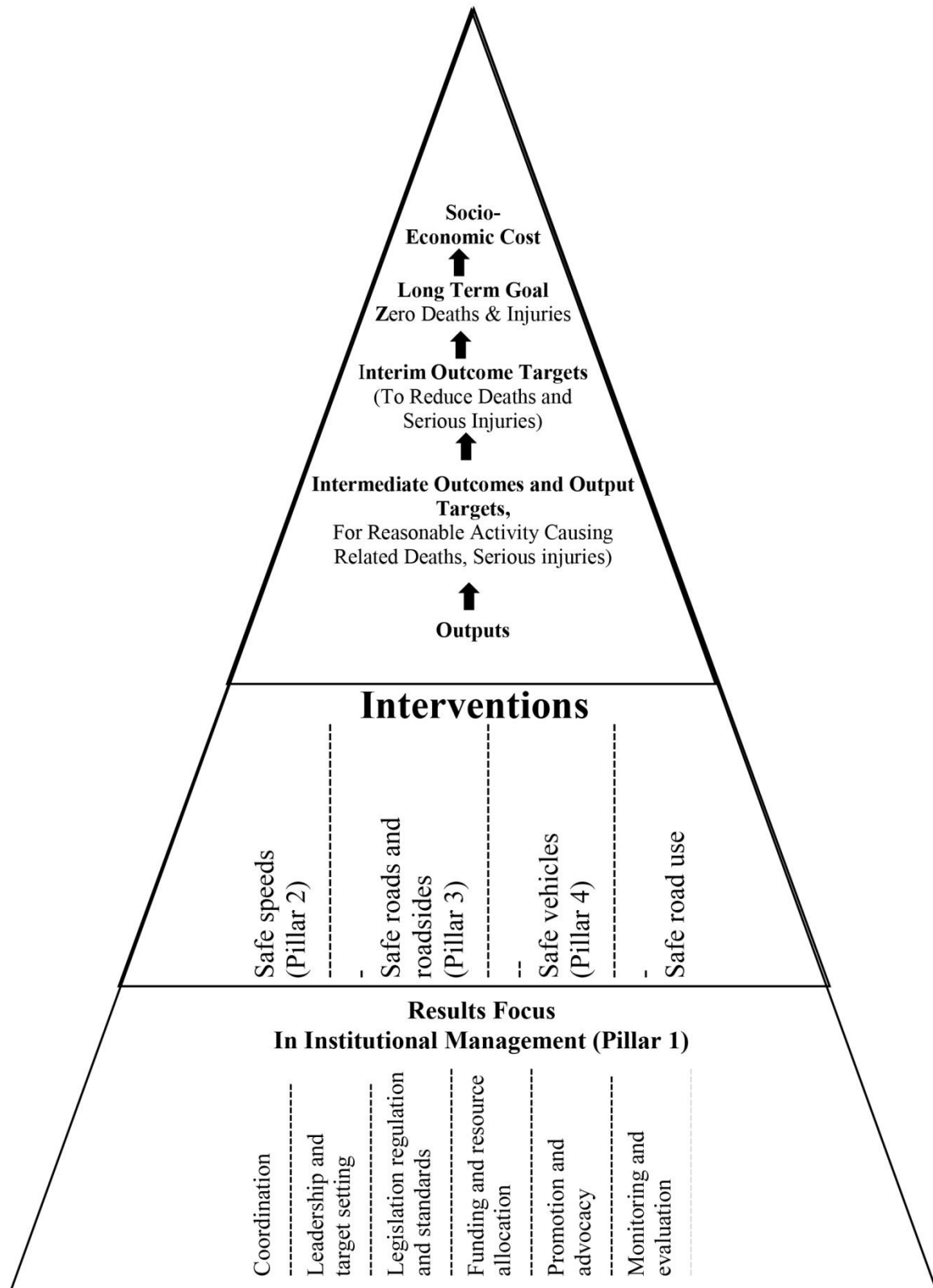


Figure 2. Road Safety Management Framework

In particular, institutional management functions were identified which drive more effective interventions and better results. When given full effect, these institutional road safety management functions provide direction

on how cost – effective interventions are identified, prioritized, scoped, funded, targeted and delivered. They also assist in building support for sustained road safety improvement and for building the human, financial and institutional capacity needed to sustain that support, and transform it into improved safety results, within the community. This framework provided the underpinning logic behind guidance for road safety lead agencies in Africa by the Africa Transport Policy Programme (SSATP) and continues to provide the most comprehensive and technically strong framework for road safety ([Small and Runji, 2014](#); [World Bank, 2021](#))

Interventions Programme on Accident Prevention Policies in Nigeria

In Nigeria, crashes in the third quarter of 2023 resulted in 1,323 deaths and caused injuries to 9,116 people (NBS, 2024). Nigeria seems to have increased its fatality rate per accident even through the absolute number of the accident seems to have decreased. The establishment of the Federal Road Safety Commission to evolve a scientific and cultural relevant programme to meet the objective of its role as enunciated in degree No. 45, 1988 is another in the efforts of government to increase safety measures in Nigeria. However, some of the interventions for Nigeria includes;

Seat Belts

No matter how you will drive there is always a chance that you will be involved in an accident. You cannot predict when it may happen. From statistical analysis of road traffic accidents in Nigeria since independence the chance that one will be injured in an accident in his life time is 1:3; that he may be killed in an accident is 1:9. The best protection inside the vehicle is the use of seat belts (Federal Road Safety Commission Highway Code, 1997). Similarly, the use of seat belts in Nigeria was optional, hence many vehicles are not fitted with seat belts. In those that have them, they are not being utilized by drivers and passengers alike. But currently, the Federal Road Safety Commission has made the use of seat belts compulsory to all motorists with effect from July 1st 2005 (The Guardian Newspaper, July 2nd 2005, p.14). In most developed nations especially Britain, a lot of money has been sunk into the implementation of the use of seat belts. The seat belt is an example of an active intervention for occupants because it requires some action on the part of the users ([Usman & Adebosin, 2024](#)). Its effectiveness in preventing injury and death in motor vehicle collisions has been well established by many earlier researchers ([Evans, 2004](#); [Febres et al, 2020](#))

Motorcycle helmets

In Nigeria, motorcycle helmets are crucial for rider safety, particularly in reducing head injuries and fatalities. While the federal road safety commission (FRSC) implemented mandatory helmet use in January 1, 2009. Compliance and awareness remain challenges. Wearing a helmet can significantly decrease the risk and severity of injuries, with some studies indicating a reduction of up to 70% in injury risk and death by almost 40%. The acquisition of motorcycle helmets is well within the budgets of the people who afford motorcycles in this country. In addition, promulgating helmet laws has been associated with significant decrease in mortality and injuries sustained from motorcycle crashes ([Fasakin, 2002](#); [Olakulehin et al, 2015](#); [Kolade and Adebukunola, 2021](#)).

Just like seat belts have proven effective in motor vehicle crash related injury reduction, motorcycle helmets have proved effective in motorcycle crash related injury reduction making motorcycle helmet laws a strategy with proven effectiveness. Infact, recent research findings in setting other than the United States corroborate the evidence for the effectiveness of mandatory motorcycle helmet laws. ([Tsai and Hemenway, 2000](#); [Conrad et al, 2001](#); [Atubi, 2006](#)).

Speed Limits

Drivers often think that the faster they drive, the more they impress themselves and others. They fail to remember that anybody's tires can burst, that accidents at high speed are more disastrous than accidents at low speed; that the vehicle is a machine and can fail at any time. At 100kmph, your vehicle moves at 28 meters per second, just imagine where you could be in only one second if you veer off the road which is usually less than 12 meters wide (Federal Road Safety Commission Highway Code, 1997; [Atubi, 2022](#)). The federal Road Safety Commission also imposed speed limit for all categories of vehicles i.e. 100kmph maximum speed for all private cars, 90kmph for commercial vehicles and 60kmph for trucks. But common sense often dictates lower speed limits. Speeding on highways is a major cause of traffic crashes. The effect of speed on causing traffic related crashes, injuries and deaths has been documented in many settings ([Yannis et al, 2024](#); [Abdulghani, 2020](#)). For example, the 1995 repeal of the United States national maximum speed limit, allowing states to raise interstate speed limits, resulted in a 15% increase in fatalities in 24 states that raised speed limits. In Adelaide, Australia the risk of severe crash involvement was found to increase as vehicles speed increased ([Moore et al, 1995](#)). In fact, the over 20% reduction in traffic crashes and deaths in Brazil has been partly attributed to speed limits which have been posted on many roads since 1998 ([Polidefigueiredo, 2001](#)).

Public Education targeting motorists

Your safety depends on what you see and how you react. If you need spectacles to meet the official eye sight standard wear them. It is an offence to drive with uncorrected defective vision. For example, a Nigerian study found a third of taxi drivers to have poor vision (Alakija, 2003). Although the findings from a 1999 study revealed the ineffectiveness of driver education for young drivers, there is some evidence that general public education along with some behavioral modification that targets motorists may have some impact on road safety. One area is education of motorists on posted traffic signs. A recent study in three countries i.e. United States, Sweden and United Kingdom, showed that comprehension of 28 posted traffic signs for drivers were related to years of driving experience (Ai-madani, 2000).

Traffic Control by Signs

A thorough knowledge of traffic signs, signals, road and markings together with signals by authorized traffic officers are to ensure a smooth and safe traffic flows. You must know them and be able to recognize them immediately. In the case of regulatory signs such as stop at intersection, stop police, stop highway survey, no left turn, no right turn, no “U” turn, no entry for lorries, no waiting etc., you must obey them without hesitation.

Conclusion

This review has revealed that individual based interventions have been found to be very effective as compared to other interventions. This paper suggests that the majority of the accidents are as a result of drivers' behaviour. Therefore, the paper is anchoring on behaviour change to reduce road traffic crashes. This change in behaviour can be done through sobriety check points, driver education, and mass media campaigns for both drivers and other road users. In this vain, there is need for Nigeria to strengthen interventions that target drivers, pedestrians, and motorcyclists,' Road safety is a shared responsibility. Reducing risk in the World's road traffic systems requires commitment and informed decision making by government, industry, non-governmental organisations and international agencies. It also requires the participation of people from many different disciplines, including road engineers, motor vehicle designers, law enforcement officers, health professionals, educators, and community groups.

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