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Exploration of Road Safety Measures to Prevent Road Traffic Fatalities in South Africa

Modipa Mmakwena^{1*}, Olutola Adewale², Kockott Sean³

¹Tshwane University of Technology, 2 Aubrey Matlakala St, Soshanguve, Pretoria, 0001, South Africa *Corresponding Author E-mail: modipamv@tut.ac.za

Abstract

Road traffic accidents is a global problem where road users are losing their lives on the road even in South Africa is prevalent. Compliance to the rules of the road is important aspect of road safety and road users should play their part on the road. RTA is a collective responsibility and law enforcement agencies should lead this important task to ensure that road users are safe whenever they are on the road. The inability of law enforcement agencies to formulate road safety measures to address road traffic fatalities is a major problem in South Africa. This article focused on road safety measures to curb factors contributing to road traffic accidents in South Africa. The article is based on a qualitatively rooted methodology including a wide range of primary and secondary sources focusing on road safety measures to overcome road traffic accidents. The article further draws on the findings from the world on road safety measures and formulate steps to counteract road traffic accidents in South Africa. Road safety measures could play a critical role in changing the behaviour of road users other than just focusing on reducing road traffic accidents. The research based key steps leading to the prevention of road traffic accidents. The first step related to the process of raising awareness in road safety; capacitate law enforcement agencies with resources to address non-compliance on the road and lastly to strengthen partnerships in road safety to counteract road traffic fatalities.

Keywords: Road Traffic Fatalities, Intelligence, Law enforcement, Road Users, South Africa

Abstrak

Kecelakaan lalu lintas jalan adalah masalah global di mana pengguna jalan kehilangan nyawa mereka di jalan bahkan di Afrika Selatan adalah lazim. Kepatuhan terhadap aturan jalan adalah aspek penting dari keselamatan jalan dan pengguna jalan harus memainkan peran mereka di jalan. RTA adalah tanggung jawab bersama dan lembaga penegak hukum harus memimpin tugas penting ini untuk memastikan bahwa pengguna jalan aman kapan pun mereka berada di jalan. Ketidakmampuan lembaga penegak hukum untuk merumuskan langkah-langkah keselamatan jalan untuk mengatasi kematian lalu lintas jalan merupakan masalah utama di Afrika Selatan. Artikel ini berfokus pada langkah -langkah keselamatan jalan untuk mengekang faktor-faktor yang berkontribusi terhadap kecelakaan lalu lintas di Afrika Selatan. Artikel ini didasarkan pada metodologi yang berakar secara kualitatif termasuk berbagai sumber primer dan sekunder yang berfokus pada langkah-langkah keselamatan jalan untuk mengatasi kecelakaan lalu lintas jalan. Artikel ini lebih lanjut mengacu pada temuan dari dunia tentang langkah-langkah keselamatan jalan dan merumuskan langkah-langkah untuk melawan kecelakaan lalu lintas jalan di Afrika Selatan. Langkah-langkah keselamatan jalan dapat memainkan peran penting dalam mengubah perilaku pengguna jalan selain hanya berfokus pada pengurangan kecelakaan lalu lintas jalan. Penelitian berdasarkan langkah-langkah kunci menuju pencegahan kecelakaan lalu lintas jalan. Langkah pertama terkait dengan proses peningkatan kesadaran keselamatan jalan; kapasitas lembaga penegak hukum dengan sumber daya untuk mengatasi ketidakpatuhan di jalan dan terakhir untuk memperkuat kemitraan dalam keselamatan jalan untuk melawan kematian lalu lintas jalan.

Kata kunci: Kematian Lalu Lintas Jalan, Intelijen, Penegakan hukum, Pengguna Jalan, Afrika Selatan

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INTRODUCTION

Road traffic fatalities is a major problem worldwide even in South Africa is prevalent where many road users lose their lives on the road. Non-compliance to the rules of the road contribute to high number of fatalities as there are no effective strategies to counteract the problem in terms of law enforcement. Department of Transport and other government departments need to work together to come-up with measures which could address the problem of RTA. Non-compliance to the rules of the road is a major problem as human factor is found to be a contributory factor to high rate of fatalities worldwide. It is imperative to understand and analyse the causes of road traffic accidents and implement road safety measures to curb fatalities on the road. It should take a zero tolerance policy toward the most common transgressions dangerous and reckless driving; disregard for traffic rules; jumping red lights; driving under the influence of liquor; failing to use seatbelts; and driving without a helmetto bring about a visible change (Gopalakrishnan, 2012). It is of utmost importance for Road Traffic Management Corporation to have a research unit which would identify the shortcomings in road traffic accidents and formulate road safety policies or come-up with strategic measures and counteract corrupt activities within law enforcement agencies. It is also the responsibility of road users to use their intelligence on the application of the rules of the road as well as how to maneuver in traffic. The driver's ability to assess risk and make sound judgement and his behaviour on the road is a function of his level of intelligence and this level of intelligence is not necessarily academic but emotional (Stephens and Ukpere, 2017). Furthermore, it was noted that the level of education does not have an impact on the high rate of road traffic accidents and what is important is to strengthen the driving license testing centres to produce highly skilled drivers. This could assist road traffic authorities in curbing fatalities on the road. The problem of producing incompetent drivers in South Africa is a setback for road safety initiatives and this should be addressed with a sense of urgency.

Lack of experience in necessary driving skills and capabilities is a major reason why young drivers are more involved in road crashes (Beirsness, 1996; Texas Transportation Institute, 2005). Therefore, there is a need to address the complexities inherent in driving by knowing the factors that actually enhance the occurrence of accidents and try as much as possible to guard against their influences so that safety can be achieved on the roads and law enforcement agencies need to do much better to counteract the causes of accidents proactively using road safety measures. It is the responsibility of road users to ensure that they adhere to the rules of the road and law enforcement agencies should make sure that the roads are conducive for road users to move from point A to B without difficulties. Improvements in traffic law enforcement can lead to rapid reductions in deaths and injuries and this will require drivers to obey the speed limit, yield to pedestrians and cyclists, wear seatbelts, avoid drunk driving, and use child restraints can have a powerful impact on changing road user behaviour (Luke and Sharpin, 2019). Furthermore, in New South Wales, Australia, a higher penalty for speeding offences by novice drivers resulted in a 30 percent reduction in the number of fatal crashes involving those drivers. Consistency in enforcing the law is critically important in curbing fatalities on the road. Law enforcement officials should adhere to the code of ethics and conduct themselves in line with the code of ethics. It is imperative for law enforcement officials to lead by examples and ensure that their conduct will enhance the credibility of their agencies. This will send a strong message to road users that there's no space for illegal activities on the road and this will force them to comply with the rules of the road.

Emotional intelligence is of utmost importance in the law enforcement agencies, officials need to be at their best when they implement or enforce the law on the road to avoid obstacles with road users. Getting safe, competent and well-trained drivers on the road is part of the battle and education programs

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for new drivers should be thorough, highly supervised, regulated, hands-on and start early and such programs, which have scattered coverage in many places, should be introduced in schools to help adolescents build their competencies as early as possible (Luke and Sharpin, 2019). Furthermore, in New Zealand, for example, graduated licensing systems, where young drivers undergo a three-stage approach (i.e. supervised learning period, intermediate license and full-privilege license), have reduced the number of hospitalized 15-19-year-olds by 23 percent. Law enforcement agencies should ensure that more is done in terms of fixing driving license testing centres to produce competent drivers and this move could play a critical role in reducing fatalities in South Africa. Many motorists lack driving skills as a result of getting driver's license through corrupt means and this put them at risk of being involved in road traffic accidents. Road safety measures should address human, vehicle and environmental factors as they contribute to RTA in South Africa. It is of paramount importance for law enforcement agencies to prioritise road traffic accidents as one death is too many. Road traffic accidents can be prevented. Therefore, government need to act to address road traffic fatalities in a holistic manner and this requires involvement from multiple sectors, such as transport, traffic police, health, education, and actions that address the safety of roads, vehicles, and road users (World Health Organisation, 2018). This article aimed to explore road safety measures to prevent road traffic accidents and identify existing challenges in preventing this problem and recommend practical solutions in line with United Nation Decade of Action for Road Safety 2016-2030.

RESEARCH METHOD

This article utilised qualitative, case study based approach. The approach is supported by analysis of primary and secondary sources focusing on the exploration of intelligence measures to prevent road traffic accidents in South Africa. This article draws on the findings from the world on road safety measures in curbing road traffic fatalities and formulate steps to overcome them. Road traffic accidents can be prevented, governments need to take action to address road safety in a holistic manner and this requires involvement from multiple sectors such as transport, police, health, education, and actions that address the safety of roads, vehicles, and road users (World Health Organisation, 2021). Furthermore, effective interventions include road safety measures such as designing safer infrastructure and incorporating road safety features into land-use and transport planning, improving the safety features of vehicles, improving post-crash care for victims of road crashes, setting and enforcing laws relating to key risks, and raising public awareness. This article seeks to explore road safety measures to prevent road traffic accidents in South Africa and ensure that road users are safe whenever they are on the roads. The epistemological grounding of the project is rooted in the interpretative methodology as exemplified by Saunders, Lewis and Thornhill (2007).

RESULT AND DISCUSSION

Partnership theory of crime prevention

Crime prevention comprises of strategies and measures that seek to reduce the risk of crimes occurring, and their potential harmful effects on individuals and society, including the fear of crime, by intervening to influence their multiple causes (Kruger, Lancaster, Landman, Liebermann, Louw and Robertshaw, 2016). Public safety partnerships are typically dominated by law enforcement agencies and tend to focus on enforcement and order maintenance strategies, with limited attention to the role of the community or other agencies in the prevention of crime (Rosenbaum, 2003). Understanding the reasons why partnerships come into being will help to predict their level of success. Partnerships emerge in

response to specific incidents or problems, a recognized need for community-wide or regional planning, and/or new funding opportunities (Rosenbaum, 2003). Partnership is about fostering relationship between stakeholders, in order to achieve some common ground and in the law enforcement field, there is also a desire for change caused by the problems of perceived lack of policing in terms of preventing road traffic fatalities, especially to pedestrians in the delivery of police services, which regularly produces a cry for better police community partnerships (Aldrich, 1979; Alpert and Moore, 1993).

The judged ineffectiveness of traditional reactive police methods, which opens the door for problem-oriented policing and prevention models; and the absence of a coordinated, criminal justice system to handle public safety issues, which has frustrated those seeking effective justice and deterrence (Bailey, 1986). The Criminal justice system cannot, by itself, solve the complex problem of road traffic fatalities in our society. Resources from outside the system are desperately needed, as well as new ways of thinking about these problems from the inside (Lavrakas, 1985; Rosenbaum, 1986, 1988). In a nutshell, given the multiple and complex causes of road traffic fatalities, especially to pedestrians and a growing chorus of scholars, argue that a new approach in needed, one that tackles these problems from multiple angles, applying a multitude of strategies. This line of reasoning has been used to justify the creation of anti-crime partnerships or coalitions. A group of organizations that can bring distinctive but complementary skills and resources to the table and can produce coordinated and targeted responses to public safety problems (Rosenbaum, 2003). It is important for the Department of Transport, together with all their agencies, to work together with communities to counteract this problem of road traffic fatalities whereby the country has spent lot of money on the victims of road traffic accidents through the Road Accident Fund (RAF). It has a negative impact on the economy and families of the affected victims as it leaves children without parents or their loved ones. This theory helps in terms of creating a working relationship between the department and its stakeholders and it should also pay special attention to the inter-organisational capacity to respond to problems with creativity, intensity, and/or coordination of interventions (Rosenbaum, 2013). Enforcement strategies require careful planning, including community input and endorsement. To achieve this, the police and the community must have a solid working relationship built on mutual respect and trust (Ramirez et al., 2000).

Law enforcement efforts to encourage citizen participation are typically limited in scope. The police, when they do reach out to the community, would like citizens to serve as their "eves and ears", but not to become too serious about strategic planning or crime control initiatives (Buerger, 1994; Friedman, 1994; Rosenbaum, 1988, 1998b). Strong leadership is considered the key to successful partnerships, it also engages in a range of activities, including prioritizing and defining problems, analysing the target problem, reviewing the literature for best practices, designing new intervention strategies (action plans), coordinating the implementation of these strategies, monitoring partnership effectiveness and adjusting to feedback received from the environment (Rosenbaum, 2003). Research suggests that success with implementation and group maintenance is associated with good leadership (Bailey, 1986; O'Sullivan, 1977). Community safety receives attention in South Africa's primary strategic framework for development, the 2012 National Development Plan (NDP). Chapter 12 (Building safer communities), sets out recommendations aimed at improving the functioning of the criminal justice system and at protecting vulnerable people, such as women, the youth, as well as rural communities (National Development Plan, 2012). Furthermore, the NDP acknowledges that an integrated approach to safety and security will require coordinated activity across a variety of departments, the private sector and community bodies, and it encourages community activism and responsiveness and by 2030, people living in South Africa should feel safe and have no fear of crime. The importance of well-coordinated law enforcement is crucial in achieving

national development plans in relation to community safety and to develop a sense of trust among stakeholders involved in road safety or community safety because one death is too many and the community at large is affected by these unfortunate circumstances. The visibility of law enforcement on the road plays a vital role in terms of preventing crime, for example hijacking of vehicles in South Africa is very high when compared to other countries. According to statistics released by the South Africa Police Service in March 2017, a total of 12 743 vehicles were hijacked in South Africa between April 2016 and December 2016 – that's 14.9% more than in the 2015/16 financial year (Wheels 24, 2017).

As a result, it put other road users at risk of being involved in road traffic accidents, because in other cases, criminals fleeing from law enforcement officials and they will not follow the rules of the road. They flee because their target is to ensure that the stolen vehicle is placed where they will be able to sell it without police finding it and it also endangers vulnerable road users, such as pedestrians, because of the speed they drive at in order to get the vehicle to a safe place for illegal trading. Traffic enforcement made law enforcement activities more visible, and thus it served as a general deterrent to crime (US Department of Transportation, 2013). Furthermore, law enforcement managers should determine how best to deploy officers for trafficenforcement. Maps can help to provide a fact-based picture of where crime is occurring in a community, thus helping to balance citizen perceptions. Road deaths and injuries are preventable where a wide range of effective road safety interventions exist and a scientific system approach to road safety is essential to tackle the problem. This approach should address the traffic system and investigate interactions between vehicles, road users, and road infrastructure to identify solutions (Gopalakrishnan, 2012). To send strong messages to offenders of traffic violations, it is important to ensure that the security cluster works in a way that they could win all cases of traffic violations and send the offenders to prison, as this impact negatively on the economy of South Africa, while the victims of road traffic accidents are left suffering, because their bread winners were taken away by lawless road users.

Human factor as a contributor to road traffic accidents

Road users, pedestrians, cyclists and motorists need to realise that the government can do only so much to improve road safety and prevent the number of fatalities on the roads. Unfortunately, too many South Africans have an extremely bad attitude towards safe road use, and all the education and enforcement in the world will not stop those intent on playing by their own rules. Without a change of attitude among road users and, more importantly, a respect for the law, efforts to prevent road traffic fatalities and crashes will fail. The death of road users is one of the problems the traffic authorities in South Africa are faced with and it is important for the Department of Transport and other stakeholders to come up with solutions. It is important for all stakeholders to participate in road safety to allow the free flow of traffic. Junju-Omara and Van der Schuren (2006), stated that human factors are the main causes of road fatalities in South Africa and other aspects of human behaviour which influence the road safety risk are jaywalking, age, gender, and the violation of traffic rules and regulations. Road users who use the road while intoxicated put other road users at risk of being involved in road traffic accidents. Walking and driving while intoxicated is a major problem on South African roads and much should be done in educating and encouraging road users to refrain from using alcohol while driving. This makes drivers use excessive speed and as a result it impacts on all road users.

Most of the accidents in South Africa are caused by human factor through alcohol and speeding. It is important for law enforcement authorities to work harder and enforce the law consistently to discourage this behaviour. Pedestrians are at risk because most of them in South Africa use walking as a means of transport from and to work and as a result their lives are always at risk since most pedestrians are killed on the road (Arrive Alive, 2005). The Department of Transport (2012), stated that human factors in rural and urban areas in South Africa contributed a total of 738 fatalities in 2003 and of these, urban areas constituted 133 and rural areas 605. Since most people in rural areas use walking as a means of transport, it is the reason why most pedestrians are at risk of being involved in road accidents which can lead to death. In South Africa, similar high figures were recorded in 2003; the MRC-UNISA National Injury Mortality Surveillance System (NIMSS), revealed that pedestrians accounted for the largest percentage (39.5%) of traffic-related deaths (Matzopoulos, 2004). The most important action pedestrians should take is to wear reflective clothes, especially during the night, because it helps motorists to see pedestrians crossing the road as well as following the rules of the road. Road users should be encouraged to comply with the rules of the road as this practice could save their lives on the road.

Using the road while intoxicated

Impaired driving is one of the biggest, yet preventable risks to road safety and many countries have for several years launched campaigns to reduce the toll of impaired driving while focusing on specific highrisk populations is one way to gain a better understanding of impaired driving and design possible strategies for reducing risk (Arrive Alive, 2022). Furthermore, the characteristics of crashes involving young drivers differ from those involving older drivers in some important ways. For example, crashes involving alcohol, speeding, and carrying of passengers are about 20 times more likely for teens than for middle-aged adults and crashes occurring at night and involving both alcohol and passengers are about 9 times more likely. Getting behind the wheel of a vehicle- car, truck, motorcycle or any other motorised vehicle after consuming alcohol is a serious crime (Alcohol Rehab Guide, 2022). Furthermore, drinking and driving is sometimes called driving under the influence (DUI) or driving while intoxicated (DWI), and it involves operating a vehicle with a blood alcohol content (BAC) and safe driving requires the ability to concentrate, make good judgements and quickly react to situations. However, alcohol affects these skills, putting yourself and others in danger. Drunk Driving is one of the biggest threats to Road Safety in South Africa and research indicates that 50% of people who die on the roads have a blood alcohol concentration above 0.05 gram per 100 millilitres (Arrive Alive, 2022). According to a systematic review, alcohol ignition interlocks, which prevent drivers from starting the engine if their blood alcohol level is over the legal limit, appear to be effective when the device is installed in the vehicle of potential offenders (Willis, Lybrand and Bellamy, 2004).

Automotive companies should assist in installing above devices to detect the level of alcohol in drivers to prevent them from starting the car while impaired as this is the risk which put the driver and other road users of being involved in RTA. Drink walking, that is walking in a public place while intoxicated, is associated with increased risk of injury and fatality (Gannon, Rosta, Reeve, Hyde, and Lewis, 2013). Furthermore, young people, especially males, are prone to engaging in this behaviour, yet little is known about the factors associated with individuals' decisions to drink walk. The negative impact of alcohol use on driver behaviour has been widely acknowledged and however, pedestrians' use of alcohol and the resulting impact on their safety has received relatively less attention (Haque, et al., 2012). It is generally accepted and commonplace for patrons in bars and nightclubs, having consumed alcohol, to choose to walk to their next destination or to start drinking at home and walk to a licensed venue or party, to continue drinking (O'Connor et al., 2004). The risks associated with these behaviours, known as drink walking, are perceived by the public and young people particularly, to be less dangerous than drink-driving (Lang, Tay, Watson, Edmonston and O'Connor, 2003). According to the South African National Injury Mortality Surveillance System (2001), there were 25 361 fatal injuries registered at 32 of the state

mortuaries in 2001 and this represents approximately 35% of all non-natural mortality cases in South Africa in that year. Furthermore, transport related deaths accounted for 27% of all the fatal injuries and pedestrians were the group of road users most frequently killed (37.3%), followed by passengers of vehicles (17.4%), drivers (14.0%) and cyclists (3.1%). Alcohol is a major risk factor for all road users and more should be done to counteract the use of alcohol on the road. Tests for Blood Alcohol Concentration (BAC) level, was conducted on 2 372 (or 34.6%) of the 6 859 transport-related deaths and more than half (51.9%) of all transport-related deaths had elevated levels of BAC, and of these positive cases, 91% recorded BAC levels of 0.05 g/100 ml or higher (South African National Mortality Surveillance System, 2001). The Automobile Association Foundation (2013), stated that drunken pedestrians may be as much of a danger on South African roads as drunken drivers.

Furthermore, every drunken pedestrian who is a danger to him /herself, is as much of a danger to vehicular traffic and when motorists hit drunken pedestrians, there are no statistics to show how many vehicles have already managed to avoid the same person while when a motorist is unable to avoid a drunken pedestrian, the lives of everyone in his vehicle and in surrounding vehicles are put at risk. It is realistic to suggest that a single drunken pedestrian on the road could ultimately be liable for the death of an entire minibus taxi or bus full of passengers (Automobile Association Foundation, 2013). Patek and Thoma (2013), stated that there are several measures available for specifically preventing intoxicated pedestrian accidents and it would likely have a large effect on the total number of pedestrian casualties and ensure road safety to all road users. Furthermore, (a possible exception is a statutory limit on the blood alcohol level in public places, accompanied by enforcement) instead, in most respects, the improved safety of intoxicated pedestrians will come about by making the environment safer for all pedestrians, drunk or sober. The measure that would be expected to have the greatest effect quickest is a reduced speed limit, especially in locations where traffic is busy and there are many pedestrians (Hutchinson, Kloeden and Lindsay, 2009). Drinking impairs the ability to drive and increases the risk of causing an accident and the effects of alcohol consumption on driving-related functions are modulated by some factors, such as form of consumption (regular or infrequent), expectations about their consumption, expertise in driving and driver's age (Alonso, Pastor, Montoro and Esteban, 2015).

Furthermore, alcohol is a major risk factor in road traffic accidents and from the objective standpoint, alcohol interferes with the skills needed to drive safely, as evidenced by numerous studies on driving under the influence of alcohol conducted to date. Alcohol impairs driving ability by either depressing or stimulating the central nervous system. Zhao, Zhang and Rong (2014) measured the effects of alcohol on drivers and driving performance and found that alcohol consumption influenced drivers' attitude, decision-making, alertness, judgement, response, and control of the motor vehicle. With regards to driving performance, researchers found that average speed, speed standard deviation, average lane position and lane position standard deviation were significantly affected by alcohol intoxication, indicating changes in driving attitudes and behaviours (Zhao et al., 2014). In addition to the direct impact of alcohol consumption on road traffic crashes, alcohol is also believed to influence other aspects of driver safety, for example seat belt wearing, helmet use and speed choice (Global Status Report on Alcohol and Health, 2014). It is imperative for road users to desist from using the road while impaired as this type of ill behaviour put many road users at risk of being involved in road traffic accidents and more should be done to counteract the problem of intoxicated road users by all stakeholders involved in road safety.

Drunken driving laws

The National Road Traffic Act, 1996 (Act no. 93 of 1996), provides that anywhere you are driving within the Republic of South Africa, these laws are extremely important to be obeyed. These laws are in place to help protect the community and to make sure that drunk drivers are reprimanded. The legal blood alcohol limit in South Africa is less than 0.05 gram per 100 millilitres and the legal breath alcohol limit in South Africa is less than 0.05 gram per 100 millilitres of breath. The Constitution of South Africa (1996); the legal implication of Road Traffic Act (RTA) has been in effect since March 1998. According to this Act, on a public road no person shall:

drive a vehicle; or

occupy the driver's seat of a motor vehicle, the engine of which is running, while under the influence of intoxicating liquor or a drug having a narcotic effect in any prosecution for a contravention of the provisions of subsection (2), it is proved that the concentration of alcohol in any specimen of blood taken from any part of the body of the person concerned was not less than 0.05 grams per 100 millilitres at any time within two hours after the alleged offence, it shall be presumed, until the contrary is proved, that such concentration was not less than 0.05 grams per 100 millilitres of blood at the time of the alleged offence. Walking and Driving While Intoxicated (WWI and DWI), on the road puts pedestrians at risk of being hit by motorists, therefore it is important for pedestrians to ensure that they follow the rules of the road and if not, traffic law enforcement should do their work by giving them penalties. In this case, those who drink in public should be arrested and if their behaviour does not change, should be sent for rehabilitation. A new law should be passed to make it an offence for pedestrians to be on public roads while under the influence of alcohol. Drunken people walking along the road should be penalised.

The role of Road Traffic Infringement Agency

The Road Traffic Infringement Agency promotes road traffic quality by providing for a scheme to discourage road traffic contraventions and the adjudication of road traffic infringements as well as supporting the prosecution of road traffic offences. It is the independent adjudicator or arbiter of traffic infringements and fines issued under the AARTOAct, No. 46 of 1998. As an adjudicator, it ensures that all matters that arise from traffic fines are resolved fairly. This is done by ensuring that traffic fines are decriminalised and dealt with through the administrative justice process to free the courts to deal with more serious crimes. It is of great importance to ensure that the RTIA deals with those infringers of the law, because there are many fines which are not paid by these infringers. As a result, it impacts on the transport department and its agencies in terms of executing their mandates because those fines could help in terms of ensuring road safety to all road users in the country. The Road Traffic Infringement Agency (2018), derives its mandate and functions from the Administrative Adjudication of Road Traffic Offences Act, 1998 (Act No. 46 of 1998), herein-after referred to as the AARTO Act, which states that the objects of the Agency, are, despite the Criminal Procedure Act, 1977 (Act No. 51 of 1977), herein-after referred to as the CPA:

- 1. To encourage compliance with the national and provincial laws and municipal by -laws relating to road traffic and to promote road trafficsafety;
- 2. To encourage the payment of penalties imposed for infringements and to allow alleged minor infringers to make representations;
- 3. To establish a procedure for the effective and expeditious adjudication of infringements;
- 4. o alleviate the burden on the courts of trying offenders for infringements;

- 5. To penalise drivers and operators who are guilty of infringements or offences through the imposition of demerit points, leading to the suspension and cancellation of driving licenses, professional driving permits or operator cards;
- 6. To reward law-abiding behaviour by reducing demerit points where they have been incurred if infringements or offences are not committed over specified periods;
- 7. To establish an agency to support the law enforcement and judicial authorities and to undertake the administrative adjudication process; and
- 8. To strengthen co-operation between the prosecuting and law enforcement authorities by establishing a board to govern the agency.

Road safety should be supported by equally effective public awareness, communication and education programmes, as well as a highly efficient, transparent, and expeditious adjudication process to bring traffic offenders to task. Worldwide it is proven to be the best practice for law enforcement to be effective (Road Traffic Infringement Agency, 2018). It is important for the Road Traffic Infringement Agency to embark on a marketing campaign so that people could be aware of this organisation as well as to inform road users about what they stand for in terms of road safety. To achieve road safety to all road users. Credible systems are needed to ensure data integrity of all the entity's operations and there is a need to introduce an online ticket system which could be used to issue tickets to road users/infringers and can detect those law enforcement officials who cancel infringements for their friends or family members, unlike the manual system which is currently used by the law enforcement agencies. The disadvantage about the manual tickets is that corrupt officials, in most cases cancel tickets in exchange for bribes, and as a result it impacts on the road safety. Therefore, it is important to come up with an online ticket system, which could prevent corruption in the law enforcement and it also provide accurate information which could be used in a court of law and could also assist the Road Traffic Infringement Agency in terms of offences/ tickets gathered by road traffic officials for Demerit Point System. A penalty point or demerit point system, is one in which a driver's licensing authority, police force, or other organization issues cumulative demerits, or points to drivers on conviction for road traffic offenses. Points may either be added or subtracted, depending on the system in use (Road Traffic Infringement Agency, 2018). The advantage about this system is that it will make a significant impact in terms of ensuring that road users obey the rules of the road, limit the chances of corruption. Therefore, law enforcement officials will enforce the law consistently without bias or corrupt activities, which in the past compromised road safety in our country. The rehabilitation process is very crucial for the road traffic infringement agency. The following should be done during the process:

- 1. Training is needed for those drivers who exceeded their demerit points
- 2. Road safety education;
- 3. Competent lecturers, as well as psychologists are needed to deal with human behaviour in road safety;
- 4. Facilities all over South Africa;
- 5. They should also form part of the team during road safety campaigns, to share their experiences;
- 6. Collaborations of major stakeholders in road safety, to provide information about road safety at the centres.

These traffic violators do not primarily lack skills, but positive attitudes towards social responsibility. Especially drunk drivers, jaywalking and speed offenders are characterised as not reliable in traffic. Consequently, further training of skills, education in knowledge, or a repeated driver testing would not be successful to avoid further offences (Bartl, 2003). Furthermore, driver/pedestrian

rehabilitation programmes aim at self-reflection to raise risk awareness and to change wrong attitudes, especially concerning drunk driving and jaywalking, certain evaluation studies, especially of rehabilitation programmes for drunk drivers/jaywalking, indicated that such programmes could reduce repetition rates of participants compared to control groups without participation in these programmes and as a result it will contribute positively to road safety. Price Waterhouse Coopers (2017) noted that good enforcement practices could prevent up to 5 800 fatalities resulting from speeding, 4 300 fatalities resulting from not wearing seat belts and 3 800 fatalities resulting from drunk driving. Moreover, 680 000 injuries could be avoided annually. Road safety should be prioritised by government and ensure that road safety measures are formulated and implemented. The main aim of these measures should be based on changing the behaviour of road users as most of the road users who are involved in road traffic accidents are not adhering with the rules of the road. It is of utmost importance to ensure that all major stakeholders in road safety work well with road traffic authorities to counteract road traffic accidents because road safety is a collective responsibility.

Steps to overcome road traffic accidents in South Africa

Awareness campaigns

To change the behaviour of road users, road traffic authorities should raise awareness campaigns to equip road users with knowledge and skills about road usage. It is of utmost importance for law enforcement agencies particularly road traffic authorities to host road safety campaigns nationwide particularly at hotspot areas where lot of road traffic accidents occur. Awareness of road safety messages is key in preventing road traffic accidents and it is important for the Department of Transport, as well as other major key stakeholders, to work together in promoting road safety in South Africa. The aim of road safety campaigns is to cover as many road users as possible, to ensure that they are aware of road safety using all relevant platforms such as Radio, Television, Newspapers, Social networks, etc., to provide messages to the masses on the ground. When communities are educated about their surroundings, especially when it comes to their safety, they are more likely to be vigilant and alert and therefore stay away from the dangerous areas. It is only through campaigns or the use of the media that road users can be made aware of the dangers of the road. For example, in the USA a campaign which combined education and enforcement techniques yielded results in terms of the reduction in pedestrian fatalities (Boonton New Jersey, 2007). Furthermore, new data shows that efforts to increase public awareness paid off and street Smart campaign successfully changed behaviours with results showing a 39 percent reduction in pedestrians crossing midblock (jaywalking), and an 11 percent reduction in pedestrians crossing against traffic signals. Road users should be prioritised by road traffic authorities and information about road safety be disseminated to road users all over the country and by increasing road safety campaigns, the behaviour of road users could be changed and more lives could be saved on the road. Promising strategies to overcome road traffic accidents include: high visibility enforcement as well as public information campaigns aimed at both motorists and pedestrians; identifying high-risk zones and conducting educational outreach programs at hotspot areas; and strategic partnerships with local universities and community organizations to advance safety of road users (Governors Highway Safety Association, 2016).

Capacitate law enforcement agencies with resources to address non-compliance on the road

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Law enforcement agencies should be capacitated with resources to counteract road traffic accidents. More money should be made available to Department of Transport and its agencies to formulate programmes which could address road safety in South Africa and they should employ more law enforcement officials to increase visibility at hotspot areas and training be provided to ensure that officials adhere to the code of conduct as well as enforcing the law consistently. Law enforcement agencies or road traffic authorities should appoint officials who have post matric qualifications and be trained to execute the functions of road safety at their utmost best. The current recruitment policy is failing the whole project of road safety as people are hired because there are no jobs and not on qualifications (post matric qualifications). People should be hired based on the qualifications they obtained at institutions of higher learning and this will ensure that only people who are passionate about road safety get these opportunities to serve road users. The current policies have loopholes for corruption during selection process as it only need people who have matric qualification and if you have people you know in the system it is easy to get into the law enforcement while other qualifying candidates are not getting those opportunities. Emphasis should be on people who have public safety diploma or related qualification as an entry requirement in the law enforcement agencies. Men and women of integrity should be employed in the law enforcement agencies based on their qualifications and this will help law enforcement agencies to prevent road traffic accidents and counteract corruption in the law enforcement agencies. Resources should be provided to support highly knowledgeable and skilled law enforcement officials to perform road safety in South Africa.

Strengthen partnerships in road safety

Road safety is a collective responsibility; road traffic authorities should foster partnerships with major stakeholders to prevent road traffic accidents. Department of Transport and its agencies, Social Development, Basic Education and Police should work together to address the problem of road traffic accidents as most of the road users are not complying with the rules of the road and this should be done in conjunction with business sector, taxi industry, civil society organisations and community. Road traffic accidents is a burning problem for road traffic authorities and assistance should be provided to them through holding seminars or conferences on road safety so that researchers could provide solutions to the problem. Road traffic accidents should be prioritised by the government of South Africa and best international practices be implemented to counteract the existing challenges. To meet the goal of National Development Plan 2020-2030 on halving the number of fatalities on the road is through partnerships because road traffic authorities alone could not overcome or realise the goal of NDP which is in line with United Nation Decade of Action for Road Safety. More should be done to establish and strengthen relationships with major stakeholders to prevent road traffic accidents in South Africa. For this reason, the public sector should assume responsibility for the effects of policies and initiatives upon system designers; upon road, vehicle and urban planning standards; and upon transportation, justice, health, and environmental legislation and enforcement in all segments of society, from the highest level of government down to the community to ensure road safety to all road users whenever they are on the road (World Health Organisation, 2004).

CONCLUSION

Road traffic accidents affect families and communities negatively, as it brings pain and suffering to the loved ones and in most cases, is caused by human error as road users do not follow the rules of the road and a lack of enforcing the law consistently. Road rage, speeding, drinking and walking while intoxicated, also contribute to the increase of road traffic accidents worldwide, which causes disorder in

communities. It is important for law enforcement agencies to work together with road users to overcome this problem as it also affects the economy badly as most countries spend a lot of money on the victims of road traffic accidents and on improving road infrastructure. The inability of road traffic authorities to formulate and implement policies to counteract road traffic accidents is a major problem and based on the discussion above it is evident to surmise that road traffic accidents need a collective effort from road traffic authorities to all major stakeholders. It is imperative for law enforcement agencies to benchmark with countries that are performing well in terms of preventing road traffic accidents and implement the best international practices to counteract road traffic accidents in South Africa.

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