

None Motorized Transport and Road Safety Policy Implementation in Kenya

Zedekia S*

Department of Political Science and Public Administration, University of Nairobi, Kenya

Abstract

Annually 50 million people suffer injuries as a result of traffic crashes in different parts of the world. In some countries such as Kenya road traffic fatality (RTF) is the third cause of death. Nearly these injuries are experienced by pedestrians and other vulnerable road users (VRUs). Efforts to deal with the problem in the most part assumed that VRUs are innocent victims of bad drivers and inaccessible environment. This study documents the prevalence of road traffic violations among VRUs in comparison to vehicle occupants. It also documents frequency of stops and arrest. These data is thereafter paired with similar data on other road users. The study concludes that while vulnerable road users commit most of traffic offences they are rarely targeted for traffic law enforcement. Consequently police decision on who to target for traffic law enforce undermines road safety policy implementation.

Keywords: Non-motorized transport; Road safety; Public policy implementation; Target discretion; Street level bureaucratic discretion

Introduction

In the recent years, a lot of effort has been made to promote none motorized transport with a view of increasing urban mobility and combating environmental degradation. However, these policy objectives have been undermined by the higher number of road traffic injuries among pedestrians and other vulnerable road users. Every year, over 50 million people around the globe suffer road traffic injuries (RTI). Among these injuries 1.2 million are fatal. Approximately 90% of these injuries and fatalities occur in the middle and low-income countries. It has also been estimated that 46% all RTI statistics vulnerable road users including cyclists, motorcycle riders, and wheelchair users. Kenya is one of the countries experiencing the high level of road traffic injuries (World Health organization, 2013). RTI impacts of development in a variety of varies, to begin with, it significantly contributes to the global burden of disease in view of the fact that it is currently the 9th cause of death [1]. With regard to the specific health indicators, RTI is said to be responsible for up to 30% of hospital admissions in many countries globally. Within the emergency wards, nearly half of the patients are RTI cases and 70% of those admitted in the surgical wards with brain injuries complain about the same problem. RTI is also the leading cause of disability, in Africa; there are 7,151,000 cases of disability reported annually occasioned by RTI. These issues make RTI one of the world's leading health and development problems [2]. It also undermines national development by robbing nation states their most valuable human resources, more 60% of the victims of traffic fatalities are between the ages 15 to 44 [1].

Some of the WHO proposed strategies for dealing with the problem includes: 1) enacting and enforcing legislations on key risk factors; 2) improved the road infrastructure especially by making it safe for the vulnerable road users; 3) improving vehicle standards and 4) improving access and quality of care for post-crash victims. Many countries have started applying these measures with reasonable success. Some of the notable interventions that have been undertaken include enacting policy legislations geared towards disallowing certain road user behaviour thought for being responsible to the escalating levels of RTI. In Kenya for instance in the last decade alone, more than 42 legal notices and acts of parliament targeting road safety has put in place. Beyond the foregoing efforts have been made to make the road infrastructure safe by marking the roads, reducing the number of

bends and putting clear road signs. Additionally, in light of the fact that most of the traffic injuries occur among the vulnerable road user efforts have been made to specifically target them through non-motorized transport policies.

Nairobi is one of the cities that have developed a none-motorized transport policy. It is worth noting that most of these policies have portrayed none motorized road users as victims of bad drivers and inaccessible road infrastructure for pedestrians and other none vehicle occupiers. This note withstanding Mucnene [3] conducted a Poisson regression on the causal relationship between, Drivers and Motorcyclists, Pedestrians, Vehicle Defects, Other Causes, Passengers and road defects. The study observed that "drivers and motorcyclists, pedestrians, and vehicle defects significantly resulted in accidents (P-value<0.0001 for each), while passengers (P-value 0.2969) and road defects (P-value 0.1560) did not significantly cause accidents" (ibid p4). From this data, it's deductible that the high number of road fatalities is either due to bad behaviour among drivers and the vulnerable road users does not observe traffic rules. In light of the fact that public policies are intended to change the behaviour of the policy target population, failure by road users to observe road safety policies is a clear indication of road safety policy failure.

Public policy failure occurs when there if the policy is bad if the policy has not been implemented and if the policy has been poorly implemented [4]. Previous studies have provided adequate pieces of evidence to the effect that road safety policies in Kenya are well formulated and their implementation is of course. They have pointed out however that they are not being properly implemented. Poor implementation or public policy failure for that matter is taken in this study to mean that the said policy has not brought about the desired behaviour changes among its target population. While it's clear from

*Corresponding author: Zedekia S, Department of Political Science and Public Administration, University of Nairobi, Kenya, Tel: 0723987358; E-mail: zedekia.sidha@gmail.com

Received August 29, 2017; Accepted November 03, 2017; Published November 10, 2017

Citation: Zedekia S (2017) None Motorized Transport and Road Safety Policy Implementation in Kenya. J Pol Sci Pub Aff 5: 305. doi: [10.4172/2332-0761.1000305](https://doi.org/10.4172/2332-0761.1000305)

Copyright: © 2017 Zedekia S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

previous studies the policy has failed, it's not clear whether this failure is more eminent among the motorized road users or vulnerable road users or both. In light of the statistics that show that most RTI victims are vulnerable road users, it would be interesting to find out if they are merely victims of bad behaviour by drivers or they also contribute to the prevalence of traffic crashes in Kenya. If it happens that they make a significant contribution to the road safety policy failure in Kenya, is their lack of slow behaviour change in compliance to road safety policies in anyway associated with the way the police treat them during traffic law enforcement process.

While poor implementation can also be occasioned by a variety of factors, most of it is attributable to the inappropriate administrative decision by the frontline workers in the administrative agency [5]. This stems from the fact that while the policymakers expect street level bureaucrats to use their discretionary powers to optimise on the scarce implementation resources, many times the discretionary powers are employed to serve the interest of the street-level bureaucrats as opposed to those of the policy makers and target population alike. These sentiments have been shared by Chitere et al. [6] who noted that one of the challenges facing road safety policy implementation in Kenya is the conflict of interest. The DTEO own some of the PSVs which the allow violating traffic laws with impunity. These sentiments have been echoed by Owidi [7] whose noted that Kenyan traffic police is a heaven for impunity.

consequently, the main objective of this study is to find if police discretion over the type of road user to target for road safety policy implementation affects road safety in Nairobi. It is based on the assumption during the implementation process the police pursue that own personal interests as opposed to those of the policymakers thereby undermining road safety policy implementation process. The study is guided by three fundamental research questions, namely: 1) does the police equally target vulnerable road users and vehicle occupants for road safety policy implementation 2) is there a difference in the level of road safety policy compliance between vulnerable road users and vehicle occupants and 3 what is the relationship between the categories of road users being targeted more for road safety policy implementation and those with low level of road policy compliance.

To answer these questions the study has employed the street level bureaucratic theory to investigate the choices made by traffic enforcement officers during the road safety policy implementation process. It is with the foregoing discussion in mind that the study seeks to find if DTEOs optimise on the implementation resources during the policy implementation process. The data collection and processing has been guided by cross-sectional study design composed of the questionnaire survey and qualitative approach. The study hypo this is tested through the use of Spearman's rank of correlations. The article is organized into different sections, with the first section providing theoretical overview for the study; the second is the methodology, in the third section data, is presented, in the fourth section discussions on the study conclusions and recommendations.

Theoretical Overview

Public policy implementation theories are largely divided into three categories, namely; 1) those that associate implementation failure with actions of the policy makers and bureaucratic executives 2) those that associate policy failure to the actions of frontline workers and 3) those that attribute it to both [8]. From the top-down point of view, public policies fail when either they have been poorly formulated or when the policy objectives have not been clearly communicated from by the bureaucratic executives to the implementing officers [9]. From

the bottom-up perspective on the contrary public policy, failure is attributable to abuse of discretionary powers by the frontline workers in the implementing agency [5]. The synthesizers, on the other hand, argue that policy failure sometimes is attributed to the poor formulation of the policy objective or poor communication of the policy decisions as alleged by the top down scholars, but it may also be attributed to miss-administrative by the frontline workers or even both. To this end, public policy analysis should include both the perspectives I the top-down approach and also bottom-up approach [10].

This article employs the street level bureaucratic theory to discuss the road policy implementation failure in the city of Nairobi. This theory is attributable to the writings of Michal Lipsky on the dilemma faced by public servants during the policy process, first published in 1980. These dilemmas are attributable to the fact that street level bureaucrats (frontline workers in public service) work in an environment of resources scarcity, a number of resources allocated to them are more often less than the activities within their mandate. In response to this, they are forced to ration their services by choosing among their deserving clients will be accorded a service and who will not be [11]. This is done by dividing the clients into big categories based on their social characteristics. On the basis of these decisions are made on whom more deserve than the other. Those who are seen to be more deserving are served first before others [4]. While it's expected that the administrative decisions made by street level bureaucrats would help contextualize the policy objectives to the local needs thereby improving implementation success, many times this is not the case. The street level bureaucrat has their own interest which is in most of the cases in conflict with those of the policy makers. Secondly, whenever their conflict between those of the policy makers and those of the implementers, the street-level bureaucrats always choose their own interest thereby contributing to policy failure. It is with the aforesaid discussion in mind that this study seeks to find out if the police equally target road users and in case there is any form of target discretion if it promotes or undermines the policy implementation process.

Method

This study employed a mixed method approach composed of the questionnaire survey, documents review, structured observation and qualitative approach. The choice of data collection approaches for the study was largely on the information required to test the hypothesis. The study targeted both road user and traffic enforcement officers. The road users were interviewed with a view of finding out how frequently they get targeted at the traffic checkpoints as well the frequency by which they get arrested. The enforcement officers, on the other hand, were targeted for purposes of gathering information on their enforcement practice as well as accident trends. The data collected from both the road users and enforcement officers were further triangulated through documents review and structured observation. The process of selecting the study respondents and observation sites was informed by a clustered and stratified sampling method. As already mentioned the study employed both primary and secondary sources of data. The primary sources included structured observation, questionnaire survey, KII, FGDs. The secondary sources were police records and statistical abstracts. The triangulation of the method and sources employed in the study was intended to ensure increase validity of the study findings. With regard to data process on one hand data collected through closed-ended questionnaires, statistical abstracts and structured observation were entered into SPSS data editor for the process. The study hypotheses were tested by use of Spearman's rant of correlations. The tests involved analysis of a monotonic relationship

between indicators of road user targeting and road safety policy implementation. Qualitative data, on the other hand, was thematically analysed using predetermined thematic codes.

Findings

After a brief description of the road safety implementation problem in Kenya, this section presents the study findings. The finding has been arranged in accordance to the study questions. Consequently, the first section concerns itself with the question of if the policy equally targets all road users of road safety policy implementation. The second subsection in on the level of policy compliance among various road users and the third subsection concern itself with the relationship between the frequency of traffic checks and the frequency of traffic law violations.

Types of road users targeted for road traffic policy implementation

According to the Traffic Act, the police should equally target all road users for purposes of road safety policy implementation. However, the police do not have sufficient resources to monitor all the law offenders all the time [12]. They must, therefore, choose among various road users who to target and who not to. Essentially, these choices are expected to boost the productivity of the organization, helping it to contextualize its policies and strategic plans to the local operating context. There are instances, however, where such has not been the case, instead, the street-level bureaucrats pursue their own interest as opposed to those of the policy makers. In view of this discrepancy between the policy expectation and the observation on how the police operate, the study sought to find out if the police apply equal enforcement for all the road users. To enhance the level of validity data was collected through both police interviews and observations. The figures below provide data on the responses with regard to the question above.

From Figure 1 it is noticeable that drivers were stopped more frequently at the traffic checkpoints more than any other category of road users. This was followed by passengers and motorcycles. The pedestrians were occasionally stopped by the footbridge marshals in orders to stop them from crossing at none designated places. Handcarts, trolleys, pedal cyclists were however not stopped during the observation period. The findings were collaborated by the data collected through police perception survey. According to which, 30% of all road users stopped at the traffic checkpoints are drivers. This is followed by motorcycles and Tuk Tuk. To this end, it's deductible that drivers are targeted more than vulnerable road users during the road safety policy implementation process.

Types of road users with high levels of road safety policy noncompliance

One of the possible reasons for targeting road certain road users for road safety policy implementation is their frequency of involvement if traffic violations and *ip so facto* accidents. To ascertain if the variations in the number of road users stopped are influenced by the number of traffic violations as well as accidents attributable to the category of road user, data was collected on the prevalence of traffic accidents per road user category. Figure 2 below presents data on the frequency of traffic law violations disaggregated by road user category.

From the figure above it is noticeable that most traffic violations are attributable to actions of hand cart pushers and motorcycles. The least number of violations, on the other hand, were noted among drivers and pedal cyclists. Similar views were aired by the police officers interviewed to report that most traffic law violations are associated with motorcyclists, handcarts and trolleys and pedestrians. The least number of violations reported are among pedal cyclists and passengers followed by tuck tuk and drivers. To this end, it's deducible that the number of traffic violations among the vulnerable road users is higher

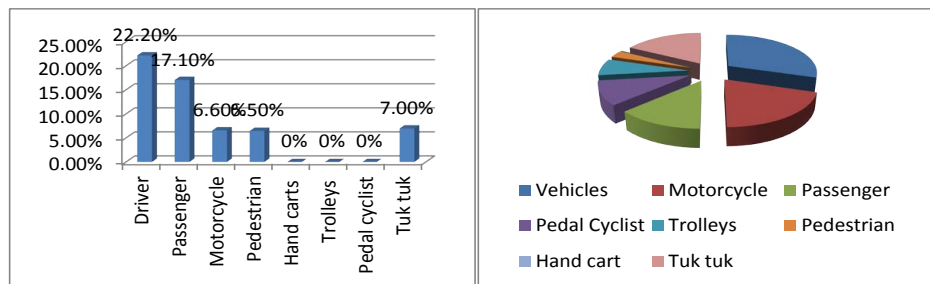


Figure 1: Frequency of traffic checks disaggregated by road user type. Source observation data, 2016. Source: Police Interviews, 2016.

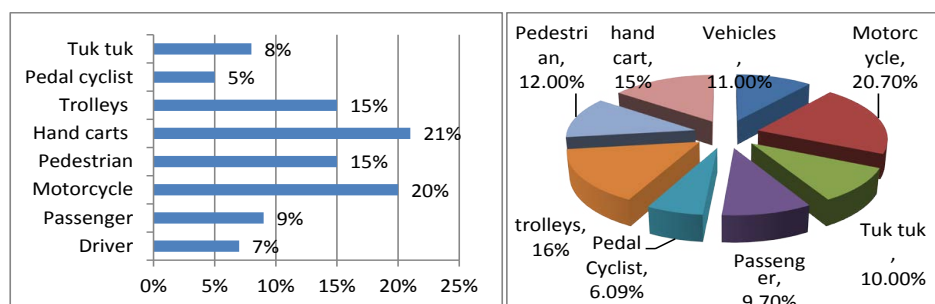


Figure 2: The road user category responsible for the highest number of traffic violations. Source: Observation Data, 2016. Source: Police Interviews, 2016.

than non-vulnerable road users. To this end, vulnerable road users are not necessarily victims of bad driving behaviour bad accomplishes in the risky behaviour that contributes to a high level of traffic injuries.

It is noteworthy, however, that not all traffic law violations lead to accidents. To this end, efforts were made to collect data on the number of accidents and fatalities attributable to different categories of road users. The table below provides data on the numbers of accidents reported to the police last six years disaggregated by road users' category. Unfortunately, data from some categories of road users such as trolleys and hard carts were not captured in the police records data.

From Table 1, it is noticeable that most of the victims of road traffic fatalities are pedestrians and motorcyclists. This phenomenon is attributable to a variety of factors including lack of road safety training as well as lack of provisions pedestrians walking spaces.

Optimization of road safety policy implementation resources by the police

As already noted earlier, one of the reasons for preserving and upholding the principle of constabulary independence as well as street level bureaucratic discretion among various frontline workers in the public service is the assumption that with such level of independence, they can contextualize the policy objectives to the local needs. They are also expected to optimize the limited implementation resources by working as emergency medical service providers in the battlefield who must divide the clients for medical services into three categories namely;

- 1) The mortally wounded, that is those with little hope of recovery,
- 2) The slightly wounded, this is a category of those who are not in need of immediate attention and,
- 3) The seriously wounded but likely salvageable if immediately provided medical attention promptly. By concentrating on the third category this category triaging provide a good guide to optimizing medical resources in the battle [5].

However, in view of the fact that street level bureaucrats pursue their own interest as opposed to those of the policy makers, many

times triaging process in the field does not yield maximum use of implementation resources. The aim of this section is to find out the relationship between the type of road users who are frequently stopped at the roadblocks and those who frequently violate road traffic laws. In view of the fact the data on both indicators of police discretion and those for road safety policy implementation were extracted from different sources. The comparison is therefore been made for each data sources and indicator. Table 2 below provides Spearman ranks of correlations between police perceptions on the frequency of traffic violations and frequency of traffic checks.

As can be seen from Table 2, there is a negative correlation between frequency of violations among different road users and number of times they are stopped at the traffic checkpoints. This is evidenced by the fact that the correlations figure is -0.1190476. To this end, it is deducible that in 11% of the scenarios, DTEO (divisional traffic enforcement officers) ranking of the frequency by road users in different categories were stopped for traffic checks were inconsistent with their perceptions of the frequency by which they violate the traffic laws.

In light of the fact that data generated through perception survey are self-reported and thus susceptible to recall biases. The study sought to increase its internal validity through triangulation with observation data. Table 3 below provides analysis of differences and similarities between road user targeting and prevalence of road safety violation.

Just like in the case with police interviews, a Spearman's rank of correlations between frequency of traffic checks and the frequency of violations revealed a negative correlations figure. Consequently, the DTEOs decisions on which vehicle to stop and which one not to at the traffic checkpoint is guided by a different motive other than increasing the level of compliance to road safety policy legislations. Some of the decisions factors that may have influenced the police decisions to stop some road users as opposed to other include the desire to make more income. "Every time you go to town you must put aside money for the police and stage boys in different bases in Kibera." Reported one of the public service vehicle drivers during the FGDs with road users held at the Olympic base in Kibra constituency, Kenya. These sentiments

Domain	2010		2011		2012		2013		2014		2015		Total	
	A	F	A	F	A	F	A	F	A	F	A	F	A	F
Drivers	242	56	269	45	298	52	270	51	272	46	271	52	1,622	302
Motorcycles	215	126	240	102	234	107	243	136	271	101	327	105	1,530	677
Passengers	1876	24	1505	45	1205	39	1376	42	1252	52	1597	62	8,811	264
Persons	1829	516	1611	515	1522	541	2572	553	1466	507	1400	494	10,400	3126
Pedal cycles	172	26	138	21	91	20	85	25	59	17	47	11	592	120
Total	4334	748	3763	728	3350	759	4546	807	3320	723	3642	724	22,955	4489

Source: Police Records, Key – A: Accidents, F: Fatalities.

Table 1: The frequency accidents and fatalities among various road users.

Road user type	Violations	Checks	Rank violations	Rank checks
Vehicles	11.00%	30%	5	1
Motorcycle	20.70%	20%	1	2
Tuk-Tuk	10.00%	17%	6	3
Passenger	9.70%	13%	7	4
Pedal Cyclist	6.09%	10%	8	5
Trolleys	16%	7%	2	6
Pedestrian	12.00%	3%	4	7
Hand cart	15%	0%	3	8

Source: Police Interviews.
Spearman's rank correlation rho.
Sample estimates: rho -0.1190476.

Table 2: Spearman rank of correlation between violations and traffic checks.

are corroborated by Chitere et al. [6] who observed that one of the challenges facing the matatu sector is lack of accountability. The police normally take bribes and allow road traffic offenders to go scot-free. Other reasons highlighted by Lipsky [5] which influences street level bureaucrats behaviors include the desire to make work comfortable, to reduce risks and increase prestige [13].

Beyond looking at the relationship between violations and frequency of traffic checks the study also looked the relationship between targeting and the number of accidents. This was found necessary in light of the fact that not all violations lead to accidents and therefore do not necessarily cause injuries or loss of property. To this end, one may assume that the police would target those road users with the highest level of propensity to cause the accident in comparison to those with low levels of propensity to cause the accident. Provided in Table 4 below is a comparative analysis of the relationship between the police ranks of the frequency of accidents among various road users and the frequency of traffic check among the same set of road users.

As it is noticeable from the spearman's test of correlation above, the DTEOs do not necessarily seek to prevent accidents while on the road. This is evidenced by the fact that a test of correlation between the police perceptions on how they target different sets of road users for policy enforcement and the frequency of accidents among the same set of road users reviled a negative correlation figure.

The study also sought to find out the relationship between severity of punishment accorded to road traffic offenders and frequency of accidents. This was found necessary in light of the fact that in light of the fact that the police cannot arrest everyone who they find to have violated the traffic laws, some offenders are simply cautioned and left to go. Given that these acts of discretion are intended to maximize the use of implementation resources, it is expected that those road users who are notorious for traffic law violations would end up being punished

more frequently and more severely as a deterrent measure. In Table 5 below discussions are made on the relationship between the frequency of arrest and the frequency of accidents.

As can be observed from the table there is a negative monotonistic relationship between the paired data on the frequency of accidents and the frequency of arrest. This is evidenced by the fact that the correlations figure is rho -0.1025978. This means that in 10% of the time the police decision on who to arrest or not to arrest traffic offenders at the checks points are incongruent with the road safety policy objectives. Consequently, it is deducible that the DTEOs decisions on the severity of punishment for road traffic offenders are not primarily determined by their need to reduce the number of accidents on the road.

The next study question is whether DTEOs target road user categories with the highest number of traffic fatalities for traffic law enforcement. In order to answer this question data on traffic fatalities were disaggregated according to different road user's categories and rank in terms the prevalence of fatalities in each of the categories. Similarly, the data on the number of road users per the paired categories were rank in terms frequency of arrest. Thereafter the data on frequency or arrest and those on the prevalence of fatalities were compared. Table 6 provides data on the test of correlation between road traffic fatality rate (RTF) and road safety implementation.

As can be seen in the table above, in only 10% of the cases was the observed frequency of arrest consistent with the prevalence of fatalities in the paired data. This means that in 90% of the time the police reasons for targeting certain categories of road users for implementation were motivated by other reasons apart from the desire to reduce the number of traffic fatalities on the road.

Conclusions and Recommendations

The study established that the police do not equally target all road users for public policy implementation. This is evidenced by the fact

Road user type	Violations	Checks	Rank violations	Rank checks
Driver	7%	22.20%	7	1
Passenger	9%	17.10%	5	2
Tuk-Tuk	8%	7.00%	6	3
Motorcycle	20%	6.60%	2	4
Pedestrian	15%	6.50%	3	5
Handcarts	21%	0%	1	7
Trolleys	15%	0%	4	7
Pedal cyclist	5%	0.00%	8	7

Data source observation.
Spearman's rank correlation rho.
Sample estimates: rho -0.3171675.

Table 3: Spearman's rank correlation between frequency of violations and traffic checks.

Road user type	Accidents	Checks	Rank accidents	Rank checks
Vehicles	9%	30%	6	1
Motorcycle	19%	20%	1	2
Tuk-Tuk	13%	17%	5	3
Passenger	4%	13%	8	4
Pedal Cyclist	7%	10%	7	5
Trolleys	15%	7%	4	6
Pedestrian	16%	3%	3	7
Hand cart	17%	0%	2	8

Source: Police Interviews.
Spearman's rank correlation rho.
Sample estimates: rho -0.2619048.

Table 4: Correlation between road user targeting and accidents; evidence from police interview.

Domain	Accidents	Arrest	Rank accidents	Rank checks
Drivers	1622	77%	3	1
Motorcycles	1530	21%	4	2
Passengers	8811	2%	2	3
Persons	10400	0	1	4.5
Pedal cycles	592	0	5	4.5

Source: Police Records.
Spearman's rank correlation rho.
Sample estimates: rho -0.1025978.

Table 5: Correlation between road user targeting and accidents; evidence from police records. Source: Police records.

Road user types	Fatalities	Total arrested	Rank Fatalities	Rank Arrest
Drivers	302	3,385	3	1
Passengers	677	907	2	2
Motorcyclists	264	60	4	3
Pedestrians	3126	0	1	4.5
Pedal cyclists	120	0	5	4.5
Total		4,352	-	-

Source: Police records, 2016.
Spearman's rank correlation rho.
Data: arrest and fatality.
S=17.948, p-value=0.8696.
Alternative hypothesis: true rho is not equal to 0.
Sample estimates: rho 0.1025978.

Table 6: Test of correlation between fatality rate and road safety implementation.

that drivers were stopped more frequently at the traffic checkpoints in comparison to motorcycle riders, cyclists, and pedestrians among other vulnerable road users.

With regard to the severity of punishment, the study established that vehicle occupants are more likely to be processed by the police for further investigations and prosecution in comparison to the vulnerable road users. This is evidenced by the fact that during the observation period, the number of vehicle occupants and operators arrested were much more than those of the vulnerable road users including riders, motorcyclists, cart pullers, trolleys among others.

The study established that the level of road safety policy non-compliance is much higher among the vulnerable road users in comparison to the vehicle occupants. Data extracted through structured observation indicated that on the one hand, 21% of the observed violations during the study period were committed by handcarts and 20% by motorcycles. On the other hand, only 7% of the violations observed were committed by drivers. These findings were corroborated by those extracted from the police interviews which indicated that rates of violation as follows; motorcycles 20.7%, trolleys 16%, hand carts 15% and vehicles 11%.

More accidents were attributable to vulnerable road users in comparison to vehicle occupants. This is evidenced by the fact that while 10,400 pedestrians have been injured in Nairobi in the last six years only 1,622 drivers have experienced traffic injuries. Similarly, while 3126 pedestrians have died during the same period, only 302 drivers have been killed as a result of traffic injuries during the reporting period.

The study established that the police decision on who to stop at the traffic checkpoints and who to let go is not guided by the information on the prevalence of violations among various road user categories. This is evidenced by the fact that the test of correlations between the prevalence of violations among various users and frequency of traffic checks revealed a negative correlation.

The study further noted that the policy decisions on which category of road users to target for road safety policy implementation were not consistent with the prevalence of accidents and fatalities attributable to those categories of road users. This is evident by the fact that a Spearman's test of correlations between the prevalence of accidents and frequencies of traffic checks revealed negative correlations. The same phenomenon was repeated with regard to the relationship between fatalities and the prevalence of traffic checks as well as the prevalence of arrests.

From the discussions above it is deducible that police discretionary choices on which category of road user to target for road safety policy implementation undermine the road safety policy implementation process. By the fact that pedestrians and other vulnerable road users do not expect to be arrested if found committing traffic offenses has reduced their motivation to obey traffic laws.

Recommendations

So as to ensure that the policy objective of both the Traffic Act and the non-motorized policy are successfully implemented, the following measures need to be put in place.

To respond to the high level of road safety policy non-compliance among pedestrians and other vulnerable road users, efforts should be made to increase road safety policy educations. This should be done through the primary agents of socialization such as the family and schools. Most of the road safety education initiatives currently being undertaken are being conducted through the mass media. The medium is not only limited in reach in light of the fact that most Kenyans do not own a television set but also the information relied upon through it is much easier to forget.

To respond to the challenge of controlling street level bureaucratic discretion effort should be made to promote result based management system among the police. Beyond periodic monitoring of the enforcement activities, each office should be given a job card. This card

would have daily log detailing their daily activities. Periodically this log would be assessed in line with the police force objectives and sanctions or rewards according to officers who have worked hardest toward the organizational objectives or not.

Efforts should be made to increase accountability among the traffic enforcement officers. This is important in light of that fact that every year. The traffic police department leads to the list of the most corrupt institution in Kenya. It has also been noted that one of the reasons for safety public policy failure in Kenya is the conflict of interest.

Acknowledgements

This report would not have appeared the way it is if not for the unyielding support of my supervisors Professor Dorothy McCormick, Dr. Patrick Asingo and Dr. Justine Magutu. I would also like to take this opportunity to thank Dr. Oyoo Yaye of Pwani University for their editorial advice during the process of writing this report.

References

1. World Health Organization (2016) World Health Statistics 2016: Monitoring Health for the SDGs Sustainable Development Goals. Geneva: World Health Organization.
2. World Health organization (2013) Global status report on road safety. Geneva: WHO.
3. Muchene LK (2011) Road accidents in Kenya: a case of poor road network or human error?
4. Durant RF (2010) The Oxford Handbook of American Bureaucracy. Oxford: OUP Oxford.
5. Lipsky M (2010) Street-Level Bureaucracy, 30th Ann. Ed.: Dilemmas of the Individual in Public Service. New York: Russell Sage Foundation.
6. Chitere PO, Thomas NK (2004) Efforts to improve road safety in Kenya: Achievements and limitations of reforms in the matatu industry. Nairobi: Institute of Policy Analysis and Research (IPAR).
7. Owidi O (2016) Kenya's traffic police a haven for impunity.
8. Birkland TA (2015) An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making. Oxford: Routledge.
9. Pressman JL, Wildavsky AB (1984) Implementation: How Great Expectations in Washington are Dashed in Oakland. Berkeley: University of California Press.
10. Weible CM, Sabatier PA (2017) Theories of the Policy Process. Berkeley: Avalon Publishing.
11. Hupe P, Hill M, Buffat A (2016) Understanding Street-level Bureaucracy. Bristol: Policy Press.
12. Kleinig J (1996) Handled with Discretion: Ethical Issues in Police Decision Making. Washington DC: Rowman & Littlefield.
13. Ministry of Forestry and Wildlife (2013) Analysis of drivers and underlying causes of forest cover change in the various forest types. Nairobi: Republic of Kenya.