

# Availability of Educational Support Systems for the Children of Survivors of Road Traffic Accidents in Kiambu County

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**Abstract:** - The purpose of this study was to examine the education support system available to RTAs survivors' children in Kiambu County. The study employed the Culture of Poverty Theory as a guiding framework. A descriptive research design was employed involving both qualitative and quantitative methods. The target population was 210 road traffic accident survivors, 420 children as well as one senior official from the Ministry of Education and another official from the County Government of Kiambu. Purposive sampling design was used to sample survivors who had lived with the disability for a period of at least five years. A total of 126 respondents was involved during data collection. Questionnaires, interview guide and document analysis were used to collect data. Quantitative data was analysed descriptively and inferentially based on need and applicability. Qualitative data was analysed through thematic prose discussions. Data was presented using Tables and Figures. The findings revealed that majority of RTAs survivors and their children received no form of support from any organization, insurance company or government offices. The researcher found that the relationship between the survivor, and their children with the community became worse after the accident. From the interview, it was learned that there were no specific policies targeted at RTAs survivor's children for their educational attainment. The study recommends that policy frameworks should be put in place to capture the learners whose parents or guardians have been victims of RTAs to ensure that when the policies for educational support are in place, they can benefit from them.

**Keywords:** Educational Support Systems, Induced Disabilities, Road Traffic Accidents

## I. INTRODUCTION

Road Traffic Accidents (RTAs) are routine occurrences throughout the globe and thousands of people lose their lives on the roads every day. Many more left with disabilities or emotional scars that they carry to the rest of their lives. Every hour of every day, at least forty die as a result of road traffic crashes implying that every day another one thousand families have to cope with the unexpected loss of a loved one (Kenith & Miller, 2004). Road Traffic Accidents (RTAs) have been increasing over the world, in the advent of geometric population growth, increasing use of vehicles and motorcycles

as well as increasing negligence by road users. It was estimated that RTAs accounted for 75.5 million disability-adjusted life years (DALYs) worldwide in the year 2010 alone (Staton, Vissoc, Gong and Toomey, 2016).

In every accident, there is a grieving family or a child deprived of love, warmth and supports from a parent. In every serious injury, there is a family that lives with the consequences and financial costs, which include hospital bills and keeping children in schools (WHO, 2011). Children in schools are most affected because the period spent at home makes them lose the content taught, hence lag behind in education. Further, RTAs leave families with psychological scars and post-traumatic stress. According to Said, Mutiso and Ogengo (2014) the cost of injury due to traffic accidents can be computed from treatment costs and lost productivity. This has been estimated to be equivalent to 1-2% of GDP of most countries. This cost trickle down to the individual families, hence leaving them impoverished, grieving, disabled and others with psychological trauma. This means that their socio-economic lives will never be the same again, and may not even be able to keep their children in school. Road traffic accidents can thus deny those children their right to education. World over, there were 57 million primary school –aged children who were out of school in the year 2011 (UNICEF, 2014). Out of this number, some were children of parents who were physically disabled and survivors of RTAs.

According to National Highway Traffic Safety Administration (NHTSA) (2015), 32,999 people were killed while 3.9 million were subjected to various levels of disability through road traffic accidents in the United States of America in the year 2010 alone. The report found that disabilities caused by RTAs in the country had affected the normal life of the survivors and their children. For instance, it was estimated that two-third of those subjected to disabilities were youths and middle-aged persons, who were either breadwinners in their families or were actively continuing with their own educational endeavors. Further, some of the victims of RTAs induced disabilities were unable to continue with their education completely, others had been forced to prolong their education

while others had been forced to move to a lower cadre learning institutions. However, the country has many Non-Governmental Organizations (NGOs) and other faith-based institutions that endeavor to support survivors of RTAs. There is no known government policy in the US that provides guideline for supporting academic achievement of survivors of RTAs and that of their children.

Over 28% of RTAs are predicted to come from Asia and Pacific region by 2020 (World Bank, 2010). In fact, by the year 2003, China accounted for 18% of all RTAs in the world with over 220, 000 fatalities in a year (WHO, 2013). The report further indicates that most of those affected are the China's vibrant youths who are in different levels of education and other activities of national importance. However, the government of China has taken a raft of measures that are aimed at addressing the problem of RTAs. Nevertheless, the country does not have a policy to support survivors and their children of RTAs in terms of academic achievements. Such supports have been left to the inconsistent and unregulated faith based institutions and NGOs.

In South Africa, 9.3% of unnatural deaths in 2008 were accounted to RTAs (Statistics South Africa, 2009). A study by Norman, Matzopoulos, Groenewald and Bradshaw (2007) found that disabilities caused by RTAs in South Africa were double the world average. Furthermore, the National Information Management and Support System (NIMSS), (2009) report shows that the rate of RTAs is increasing over time and is attributed to increased ownership of vehicles coupled with low infrastructural developments. Most of the survivors of these accidents are people who are depended upon in their families as parents or guardians while others are young people in schools. Though, the government has formulated various laws and policies to reduce the rates of RTAs, there is no mention of the support system for educational endeavors of the children of survivors of RTAs or that of survivors themselves. In Egypt, which has one of the highest road traffic fatalities in the Eastern Mediterranean, road fatality rate is 42 deaths per 100000 people. Many patients who sustain injuries through RTAs become disabled as a result of amputation, head injury or spinal cord injury (WHO, 2013). Again, the country does not have a framework or any legislation that recognizes academic achievement of RTAs survivors or that of their children.

In Kenya, about 3,000 people lose their lives in RTAs every year (Odero, Khayesi, & Hedo, 2003). They are also a major cause of morbidity. The WHO projects that RTAs worldwide would be one of the leading causes of disabilities adjusted

lifestyles by 2030 (Zimmerman, Mzige, Kibatala, Museru, & Gurrero, 2012). Kenya has one of the highest road fatality rates in relation to vehicle ownership in the world. It has an average of seven deaths from the 35 road crashes that occur every day (Zimmerman, et al, 2012). Road Traffic Accidents were estimated to cost Kenya as much as \$ 38 billion annually (Odero, et al, 2003). In mid-2014, the number of people who had lost their lives was 1,280 with another 2,336 suffering serious injuries while 1,639 incurred slight injuries. In the preceding years of 2012 and 2013, a total of 15,612 and 14,324 persons were involved in RTAs respectively (Kenya traffic police records by 18th June, 2014).

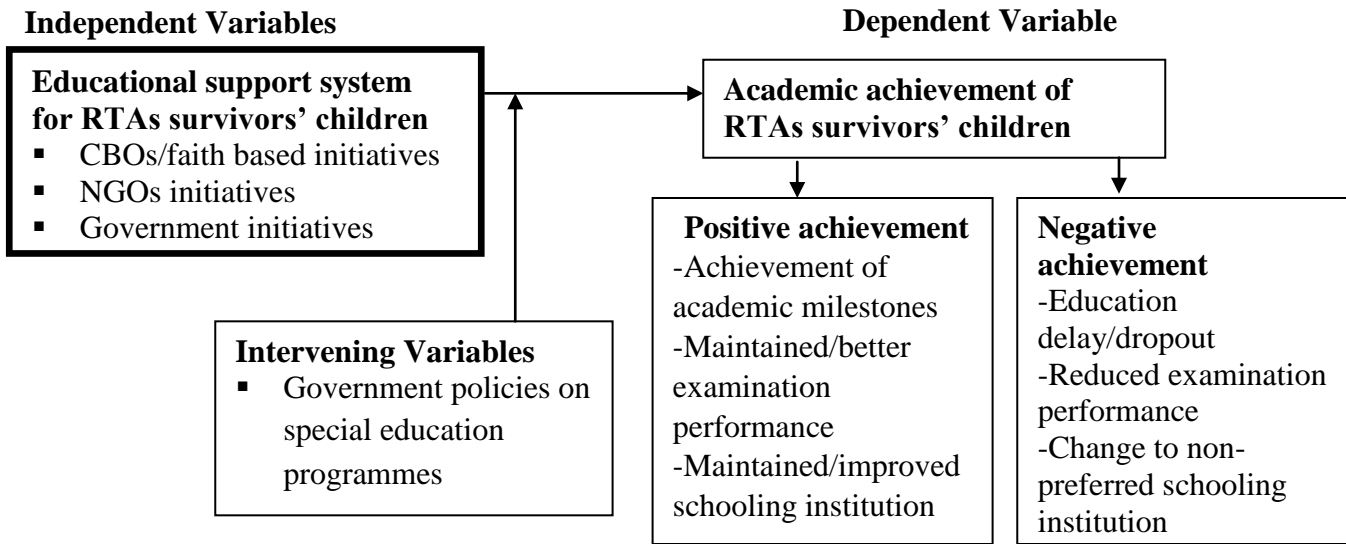
A study carried out by Said et al. (2014), shows that road injuries have continued to be the biggest component trauma burden at Kenyatta National Hospital (KNH) and they are associated with a significant mortality and disability. This leaves the family members with a big financial burden, considering that the victims of RTAs are at the peak of their productive life. RTAs affect individuals who are in the economically productive age group of 15-44 years (Puvanachandra et al., 2012). This may affect education of the victims' children among other needs; hence the need to explore the situation in Kiambu County to document the current status of the survivors of road traffic accident induced disabilities.

Despite Kenya having a traffic act which was revised in the year 2009 and was amended three years later, RTAs continue to kill, injure and cause permanent disabilities to her citizens. Furthermore, despite global and national efforts to curb the menace of road carnage, people continue to lose lives, to be injured and disabled on the roads. Studies have been conducted pertaining to road accidents Despite various studies conducted pertaining to road accidents, information surrounding road accidents and their consequences on education of the survivors, their children and other dependants is obscure. Little is available from literature showing how formal support system has been braced to address the induced disabilities that has affected education endeavours of survivors' children. It was in the light of this reality that this study the educational support systems available for RTAs survivors' children in Kiambu County, Kenya.

#### *Purpose of the Study*

The purpose of this study was to examine the educational support systems available for RTAs survivors' children in Kiambu County.

#### *Conceptual Framework*



## II. LITERATURE REVIEW

### *Educational support system available for RTAs survivors' children*

Different countries have mechanisms through which they support RTAs victims. While there are no specific programs for supporting education for the victims or their children, most countries have insurance enforcement policies that cover victims and boost their socio-economic status, hence supporting activities such as education. While studying the effects of automobile insurance and accident liability laws on traffic fatalities, Cohen and Dehejia (2015) analyzed a panel of 50 United States on their compulsory insurance policies. The study revealed that the insurance had benefits to the victims by cushioning them from incurring severe economic implications. This helped the survivors and their dependents to continue their normal life activities such as education. Mukreji (2015) agrees with these findings by explaining that, if the victims are capable of establishing the negligence which led to the accident, then the insurance company could compensate them, hence reducing the negative implications on their children's academic achievements. However, Cohen and Dehejia (2015) do not describe the general requirements before compensation by the insurance companies, leaving a gap in the study.

Tsujimura-Ito (2019) also set out to review the state of damage as well as the type of support offered to the victims of motor vehicle accidents in Japan. The researcher acknowledges that individuals are likely to be in at least one motor vehicle accident in one's lifetime and the experience has significant impact on the person and their families. The study further found that often, the families and the victim's mental health is affected after the accident. This is also associated with complicated grief as well as physical damage caused by the accident. Further compounding the problem is the post-accident secondary victimization.

Abbasi, Ali, Rozi, Khan and Jooma (2019) set out to examine the support system in existence to improve the quality of life for road traffic injury survivors and their children in Pakistan. Adopting a cross-sectional study, the researchers found that being in road traffic accidents has severe impacts on the survivor's employability and family system dynamics. As a result, there are non-governmental organizations and religious groups that set out to help the victims and their families meet their day to day needs. Further, the NGOs and other groups were found to set up funds for sponsoring the educational endeavors of the RTAs survivor's children. Ulfarsson, Nilsson, Blomstrand and Nilsson (2014) also found that in Indonesia, accident survivors and their children often receive support from NGOs, who contribute to the education of the children as well as finding some meaningful work for the survivors who are physically damaged. The study was, however conducted in Pakistani which leaves a gap in the literature. To fill this gap, the current study was conducted in Kenya, where the road traffic accident survivors and their children were targeted to help meet this gap in literature.

Similar findings were also reported by Estelle (2018) who whose study focused on rethinking the benefits of survivors in Brazil. The researcher provided a framework to analyze the efficiency and equity of the existing survivor benefit programs in this era. The findings indicated that the existing insurance covers were insufficient to meet the needs of the families. Therefore, the study found that tailoring the support programs to meet the needs of the survivors was crucial based on the level of income of the family and the severity of the accident on the survivor. Further, it was found that most of the educational support programs were not sufficient to ensure that the survivor's children continued with their education as before the accident. The funds provided were not enough and the students were often forced to change schools.

Vodopivec (2017) also reported similar findings in Peru claiming that the existing educational programs, run by NGOs

and church organizations, though existent, were not sufficient to adequately support the children of accident survivors through their educational journey. The current study highlighted the existing programs and who run the programs in Brazil and Peru. However, the study focused on survivors of all kinds including those of natural disasters, which shows that the findings are for a wider scope of survivors which does not fill the gap in the existing literature on the exiting educational support for the road accident survivors. Therefore, the gap was filled by focusing on a narrower population scope who only comprised of road traffic accident survivors and their children.

In India, Maqbool, Sethi and Singh (2019) claimed that as the country's road network and population increases, the number of road traffic accident had also risen. They asserted that road accident are the most common frequent and result in the most damage. Therefore, based on these facts, they set out to examine the existing programs created to support the families of the road traffic accidents. The findings revealed that the majority of the support programs are not geared towards the education of the survivors' children. Rather, most of them are for providing therapeutic and other treatment for the survivor. Only a few programs run by the church and NGOs were found to target the educational endeavors of the survivor's children. Insurance companies were also found to be limited in scope in regards to supporting the children of road traffic accident survivors. Overall, it was established that India generally lacks adequate educational support programs for the children of its road traffic accident survivors. Similar findings were also reported by Dorn and Brown (2016) in a Singapore study. The researchers found that the country lacked sufficient educational support programs developed specifically for the survivors of road traffic accident and their children. Consequently, it was established that the majority of the children of road traffic accidents failed to pursue their education as previously due to the lack of sufficient funds to pursue their educational goals and dreams.

Road traffic accident is reported by Legarde (2017), is a growing menace in Africa. It was increasingly taking the lives of people, leaving survivors with physical, emotional and mental trauma and negatively impacting the lives of those close to the victims and survivors. It was on this backdrop that the researcher set out to examine how the family of the victims and survivors are assisted across different African countries after the traumatic event. The findings indicated that despite road traffic accidents being one of the most occurring accidents, the support for the survivors and their families in very poor. Asogwa, (2018) further found that there lacks financial support for the children of road traffic accident survivors as the majority of them rely on bursaries and free education which does not guarantee quality of education for the children bearing in mind the additional costs of uniform and other expenditures required by the children to successfully complete their education.

In Nigeria, insurance companies are the only strategies that help victims and their children. Ishaku, Habu and Magaji (2015) conducted a study on management of road traffic accidents in Adamwa State, North Eastern Nigeria, focusing on the trend and cost. The study found out that deaths and incapacitation resulting from RTAs had huge economic effects on the children and survivors. However, insurance covers significantly reduced the economic impact, helping the survivors and their dependents to continue with their life activities such as education. Similar findings were obtained from Taera's (2014) study on motor insurance industry and its role in road safety in Ethiopia. While the two studies recognized the importance on insurance companies in supporting RTAs survivors and their children, they did not detail the requirements that needed to be addressed before compensation, leaving a gap that needs to be addressed in future research.

In Kenya, insurance companies such as Britam and CIC play a major role in ensuring victims of RTAs suffer less financial implications if they are covered, hence promoting their education support. In studying the effectiveness of the insurance act 2013 in relation public service motor vehicles, Kibet (2014) sought to analyze the efficacy of the insurance act in relation to its benefits on the insurer, insured and third party. The study analyzed the legal history and contextual development as well as appropriateness of schemes. The study found out that when the interests of all stakeholders were taken into account, the victims and their children stood to benefit, limiting financial costs that would limit their ability to continue with education.

### III. METHODOLOGY

#### *Research Design and Target Population*

The study employed a longitudinal survey design involving a cohort of RTAs survivors who had lived with the RTAs injury for at least five years and above. The cohort also included the survivors' children and was studied retrogressively. The survey involve both qualitative and quantitative approaches. This approach describes the conditions on the ground as the researcher finds them. The study targeted 210 survivors with physical disabilities as a result of RTAs, 420 survivors' children as well as 2 senior officials from the Ministry of Education (1 representing the county and the other representing national government).

#### *Sampling Technique and Sample Size*

Purposive sampling was used to select Kiambu County. Survivors of RTAs were sampled proportionately and then random sampling was used to select actual participants. Only survivors who had lived with the disability for a period of at least five years and above were considered. The nature of the study was to obtain information regarding effects of RTAs induced disabilities on academic achievement. As such, only those who had adequate experience of such a disability could provide relevant information required in the study. Additionally, the study only considered survivors who had



schooling children. Children were chosen purposively on the basis of survivors selected. Every survivor who fitted in the category of having children (for instance a parent who had children) provided 2 children to participate in the study. The researcher therefore employed 20% to calculate the sample size for survivors’ children. This calculation applied proportionately depending on the target for each stratum. The final sample size composed of 42 survivors, 84 children of survivors and 2 officials from the Ministry of Education.

*Research Instruments*

This study used three tools for collecting data which include; questionnaires, interview schedules and document analysis. Questionnaires were administered to the RTAs survivors’ children. Interview guides were administered to one senior official in the Ministry of Education, Kiambu County and one senior official from the Ministry of Education, National government. Document analysis was conducted based on the children’s three-year academic progress before and after occurrence of accidents.

*Pilot Study*

A pilot study was carried out in Machakos County, which neighbours Kiambu County and has similar characteristics with the area of study. In choosing the participants, 10% of the expected sample size was considered adequate. As such, 13 participants were sampled to participate in the pilot study. The validation of the tools checked through cross validation and triangulation. Cross-validation involved checking the responses provided; whether they addressed the questions asked. Moreover, the results of the three instruments were cross-checked to establish consistency. The researcher also involved various research experts including the supervisors, in order to make relevant corrections to the research instruments before the main study was conducted in Kiambu County. Reliability of the instruments was assessed by use of Cronbach’s alpha, with the aid of SPSS computer software. In this study, study an alpha of 0.76 was established, an indication that the results obtained were reliable.

*Data Collection Procedure*

Questionnaires for the RTAs survivors’ children were administered and the researcher collected them the very day. However, arrangements were made to collect the data at a later date in situations where the respondents were available. The number of survivors visited per day depended on the availability and speedy response of the participants. Interview for the senior official in the Ministry of Education and the County Government of Kiambu were conducted each at their own time based on their availability. All interviews were recorded in both writing and audio. The process of data collection began with obtaining informed consents from each of the respondents. The researcher then estimated the time the respondent was required to avail to the researcher. Where the researcher agreed to allocate time within the first time of visit, the researcher administered the tool as agreed while rescheduling was preferred in cases where respondents were

not available. One research assistant drawn from the community accompanied the researcher every time throughout the period of data collection.

*Data Processing and Analysis*

Data collected was analyzed using quantitative and qualitative methods. Qualitative data was analyzed using a combination of thematic approach guided by research objectives. Under thematic approach information was sorted out, classified and categorized in line with the themes of the study. Qualitative data was presented using reported statements, verbal expression and exposes. Quantitative data was analyzed using simple descriptive statistics which was presented in Tables, frequencies and percentages. Paired t-test was used to compare examination performance of respondents before and after experience of RTAs.

IV. STUDY RESULTS

*Educational Support System*

The researcher presented the respondents with a range of statements to determine whether there is an educational support system available for RTAs survivor’s children. The Table 1 presents the RTAs survivors and their children’s responses.

Table 1: Support system available

Statement	RTAs Survivors			RTAs Children’s Survivors	
		Frequency	Percent	Frequency	Percent
After you got the accident, were you given any support to enable your children to continue with their education	Yes	4	9.5	3	3.6
	No	38	90.5	81	96.4
From your experience, can you say the assistance provided has been consistent and sustainable	Yes	1	2.4	1	1.2
	No	42	97.6	83	98.8
<b>Total</b>		<b>42</b>	<b>100.0</b>	<b>84</b>	<b>100</b>

As displayed in the Table 1, the majority of respondents asserted that there is no support system in place to aid RTAs survivors educate their children. For instance, the majority of RTAs survivors 38(90.5%) said they got no support while only 4(9.5%) said they got support. According to the children, only 3(3.6%) said they got support while the bulk 81(96.4%) said they got no support. These findings contrast the findings

by Cohen and Dehejia (2015) insurance had benefits to the victims by cushioning them from incurring severe economic implications. This helped the survivors and their dependents to continue their normal life activities such as education. Moreover, according to the results by Abagale, Akazili, Welaga, Dalaba, Luu and Oduro (2013), RTAs affected annual income of the victims' families, affecting the general livelihood of their children, especially in their education endeavors. Therefore, with the lack of benefits being accorded to the families of the RTAs survivors, the economic burden can be overwhelming. The insurance companies, county governments and other organizations were not cited by the respondents as ones that offered them any support to help educate the children of the survivors. In contrast to the findings reported by Kibet (2014) who had sought to analyze the efficacy of the insurance act in relation to its benefits on the insurer, insured and third party. The study analyzed the legal history and contextual development as well as appropriateness of schemes. The study found out that when the interests of all stakeholders were taken into account, the victims and their children stood to benefit, limiting financial costs that would limit their ability to continue with education. Similarly, Teara's (2014) study in Ethiopia also showed that insurance claims can help support education endeavors of the RTAs survivors' children. However, from the results in the current study, none of the respondents stated that they received any sort of support from insurance companies. This can be linked to the complexities in the legal system identified by Kibet (2014) who despite stating that when all the interests of the stakeholders are taken into consideration, then the victims and their children stand to benefit, there is an evident lack of consideration for all the stakeholders. The survivors of RTAs and their children in the current study did not report getting any support from insurance companies which points towards an evident gap between the claims by insurance companies on cushioning the victims and their families from the impacts of RTAs to what the survivors and their children actually experience on the ground.

The researcher had also asked the respondents to indicate which organization they received their support from and only 6(14.3%) of the RTAs survivors stated that they got support from religious organizations while all the children stated they got no support. Further, the parents stated that the support was in form of hospital fee payment and not for supporting their children's education. This has no significant effect on the children's educational endeavors. Tsujimura-Ito (2019) reported that there are various support groups for the victims and their families including victim support centers and self-help groups. Okubo, and Akutsu (2018) reported similar studies where they found that there are various support centers as well as self-help groups that focus on providing financial, emotional, and mental and in some cases physical rehabilitation services to the survivors of road traffic accidents. The study was, however, focused on the general support offered to the families, but there is no mention of specific educational support strategies for the children of

motor vehicle survivors' children. Similarly, Abbasi, Ali, Rozi, Khan and Jooma (2019) reported that non-governmental organizations and religious groups set out to help the victims and their families meet their day to day needs. Further, the NGOs and other groups were found to set up funds for sponsoring the educational endeavors of the RTAs survivor's children. These studies show that most of the support survivors and their children get come from NGOs and religious groups whereas the government funds are not set aside to help the children meet their educational needs once the parent is unable to provide financially for the child following the RTAs.

Moreover, it was evident that none of the respondents benefited from the insurance company claims yet as Mukreji (2015) states, if the victims are capable of establishing the negligence which led to the accident, then the insurance company can compensate them, hence reducing the negative implications on their children's academic achievements. They have needs in form of books, toiletries, fees, transport fee, pocket money, uniform and other demands that are neglected by the support identified by the respondents. Similar assertions are made by Ishaku, Habu and Magaji (2015) who claims that RTAs had huge economic effects on the children and survivors. However, insurance covers significantly reduced the economic impact, helping the survivors and their dependents to continue with their life activities such as education. In the current case however, the insurance companies in the country are evidently not keeping up their end of the bargain, religious institutions are the only ones cited by the respondents as being the ones to support the payment of hospital bills. However, despite the cited support, the respondents claimed that the support was not consistent and could not sustain their needs. This may be attributed to the increasing demands for care brought forth by the accident. With the economic productivity of the survivor limited by the accident, then it stands to reason that the support from religious institutions, which is by good will, would not be consistent or sustainable. Consequently, the apparent lack of support from any organization that would ensure a consistent and sustainable alternate source of income of the RTA survivors and their children impact on the children's education.

## V. CONCLUSION

The study sought to examine the educational support system available for RTAs survivors' children in Kiambu County. The study concludes that there is currently no educational support system that is available for the RTAs survivor's children.

## VI. RECOMMENDATIONS

- 1) The Ministry of Education should develop a policy framework on RTAs survivor's children education achievement. It should make it mandatory that the children of RTAs survivors are included when

budgeting for allocation on special needs children to ensure that their education endeavors are achieved.

- 2) The study also recommends that policy frameworks should be put in place to capture the learners whose parents or guardians have been victims of RTAs to ensure that when the policies for educational support are in place, they can benefit from them.

#### REFERENCES

- [1]. Abagale, M., Akazili, J., Welaga, P., Dalaba, M., Luu, Y., Abagale, S., & Oduro, R. (2013). The effects of road traffic accidents on society. The case of the Kassena Nankana districts, Ghana: a quantitative survey. *The Lancet*, 381, S3. [http://dx.doi.org/10.1016/s0140-6736\(13\)61257-x](http://dx.doi.org/10.1016/s0140-6736(13)61257-x)
- [2]. Abbasi, S. A., Ali, T., Rozi, S., Khan, U.R., & Jooma, R. (2019). Quality of Life of Road Traffic Injury Survivors Aged 15-44 Years Suffered From Moderate and Severe Head Injuries in Karachi, Pakistan. *Journal of Clinical Research & Bioethics*, 10(2).
- [3]. Asogwa, S. E. (2018). Road traffic accidents: A major public health problem in Nigeria. *Public Health* 92: 237–245
- [4]. Cohen, A., & Dehejris, R. (2015). *The Effects Of Automobile Insurance And Accident Liability Laws On Traffic Fatalities*. Retrieved From
- [5]. Dorn, L. & Brown, B. (2016). Making sense of invulnerability at work - a qualitative study of police drivers. *Safety Science*, 41, 837-859
- [6]. Estelle, J. (2009). *Rethinking Survivor Benefits*. Washington DC: World Bank.
- [7]. Ishaku, D., Bala Habu, H., & I. Magaji, K. (2015). Management of Road Traffic Accident in Adamawa State, North Eastern Nigeria: The State, the Trend and the Cost. *International Journal of Computer Applications*, 119(3), 30-37. <http://dx.doi.org/10.5120/21048-3682>
- [8]. Kenith S. & Miller, R. (2004). *International statistical classification of diseases and related problem*. 1st edition. NY: IPA; 2004.
- [9]. Kibet, P. (2014). *The Effectiveness Of The Insurance (Motor Vehicle Third Party Risks) (Amendment) Act 2013 In Relation To Public Service Motor Vehicles*.
- [10]. Lagarde, E. (2017). Road Traffic Injury Is an Escalating Burden in Africa and Deserves Proportionate Research Efforts. *PLoS Med* 4(6): e170. doi:10.1371/journal.pmed.0040170
- [11]. Maqbool Y., Sethi, A., & Singh, I. (2019). Road safety and Road Accidents: An Insight. *International Journal of Information and Computing Science*, 6(4); 93-105
- [12]. Mukerji, C. (2015). *Claiming compensation under third-party motor insurance - The Economic Times*. The *Economic Times*. Retrieved 17 March 2018, from <https://economictimes.indiatimes.com/tmc/your-money/claiming-compensation-under-third-party-motor-insurance/tomorrowmakersshow/49086589.cms>
- [13]. National Highway Traffic Safety Administration. (2015). *The Economic and Societal Impact Of Motor Vehicle Crashes*, (2010, Revised). US Department of Transportation. <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812013>
- [14]. Norman, R., Matzopoulos, R., Groenewald, P., & Bradshaw, D. (2007). The high burden of injuries in South Africa. *Bulletin of the World Health Organization*, 85(9), 695-702.
- [15]. Odero, W., Khayesi, M. & Hedo, P. M. (2003). Road Traffic Injuries in Kenya: Magnitude; Causes and Status of Intervention. *Injury Control and Safety Promotion*, 10:12, 53-6
- [16]. Okubo, E., & Akutsu, T. (2018). Victim Support research project, Survey report for considering future victim supports—questionnaire survey results from crime victims' bereaved family. *Victim. Stud. Res.*, 12 (12);18-30
- [17]. Puvanachandra, P., Hoe, C., El-Sayed, H.F., Saad, R. Al-Gasseer, N., Bakrf, M. &Hyder A.A.(2012). Road Traffic safety injuries and data systems in Egypt: Addressing the Challenges, *Traffic injury Prevention*13: 44-56, Doi:10.1080/15389588.2011.639417.
- [18]. Saidi, H., Mutiso, B. K. & Ogenjo, J. (2014). MoRTAslity after Road Traffic Crashes in a system with limited Capability. *Journal of trauma management & outcomes* 2014, 8:4 <http://www.traumamanagement.org/content/8/1/4>.
- [19]. Staton, C., Vissoc, J., Gong, E., and Toomey, N. (2016). *Road Traffic Injury Prevention Initiatives: A Systematic Review and Meta summary of Effectiveness in Low and Middle Income Countries*. PLOS; <https://doi.org/10.1371/journal.pone.0144971>
- [20]. Taera, E. (2014). *Motor Insurance Industry And Its Role In Road Safety In Ethiopia. Workshop to discuss the National Road Safety Research Strategy*.
- [21]. Tsujimura-Ito, T. (2019). State of damage to and support for victims of motor vehicle accidents in Japan. *IATSS Research*, 43 (2)97-107.
- [22]. Ulfarsson T, Nilsson AL, Blomstrand C, Nilsson M. (2014). A history of unemployment or sick leave influences long-term functioning and health-related quality-of-life after severe traumatic brain injury. *Brain Injury*, 28(3):328-335.
- [23]. UNICEF, (2014). *Every Child Counts: Revealing Disparities Advancing Children's Rights Report*, New York.
- [24]. Vodopivec, M. (2018). *Labor Markets Lending and Analytical Work at the World Bank: FY2012- 2017*.
- [25]. World Health Organization. (2011). *Global Plan for the Decade of Action for Road Safety 2001-2011*, Geneva.
- [26]. World Health Organization. (2013). *Global Status Report on Road Safety: Supporting a Decade of Action 2013, Geneva*.
- [27]. Zimmerman, K., Mzige, A. A, Kibatata, P. L, Muserv, L. M; & Guerrero, A. (2012). Road traffic injury and crash characteristics in Dar-es Salaam: A population based study. *Accident Analysis and prevention*, 45, 2042144, 3-11.