

## PSYCHOSOCIAL AND ECONOMIC CONSEQUENCES OF ROAD TRAFFIC ACCIDENT ON VICTIMS IN METTU TOWN, OROMIA REGIONAL STATE, ETHIOPIA

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**Abstract:** This study was attempted to explore the psychosocial and economic consequences of road traffic accidents on victims in Mettu town, Ilu Aba Boor zone of Oromia regional state, Ethiopia. This study identified the psychological consequences of RTAs on victims, described the social consequence of RTAs on the victim, identified economic consequences of road traffic accidents on victims. Regarding methodology for conducting the study, qualitative research approach was carried out. For this study, the researchers determined the sample size based on the data saturation point. The sample study comprised 26 participants from all kebeles of the town. In this research, non-probability sampling (purposive and snowball sampling) techniques were applied. The data generated during the field were thematically analyzed. Anxiety, depression, irritability and mood disturbances, disability, inability to interact with the people as they did before the accident, economic dependency and difficulties to develop coping strategies were some of the psychosocial and economic consequences with victims of RTAs. Victims of RTA also thought that social institutions like 'Idir' and government officials could also play a great role in the minimization of RTAs on victims.

### Introduction

A road traffic accident can be defined as “a fatal or non-fatal injury incurred as a result of a collision on a public road involving at least one moving vehicle (WHO 2012). Road traffic accidents (RTAs) cause major problems worldwide. More specifically, road accidents

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are ranked as the 11<sup>th</sup> leading cause of death globally (Ameratunga et al 2006; WHO 2013) and they are the main cause of physical disability for drivers, passengers and pedestrians in developing countries (Zimmerman et al 2012). The continually developing economy also contributes to more RTAs since the use of vehicles for transportation has increased (Johansson et al 2014). Currently, road traffic accidents worldwide are estimated to claim the lives of 1.4 million people per year and injure an additional 20–50 million. By 2050 the International Futures (IFs) forecasting model anticipates that global traffic deaths will surpass 3 million people per year. However, the increase in road transportation has placed a considerable burden on people's lives. The pandemic of road traffic deaths and injuries is the major one (Yared 2012). Further in developing countries, traffic accidents account for at least 50% of total accidental deaths. WHO (2004) argues that road traffic injuries are a major but neglected public health challenge that requires concerted efforts for effective and sustainable prevention. Of all the systems with which people have to deal every day, road traffic systems are the most complex and the most dangerous.

In Ethiopia, the situation has been worsened as the number of vehicles has increased and consequently due to increased traffic flow and conflicts between vehicles and pedestrians. Despite government efforts in road development, road crashes remain to be one of the critical problems of the road transport sector in Ethiopia (UNECA 2009). Every year many lives are lost and much property is destroyed due to road traffic accidents in the country. The country has experienced an average annual road accident of 8115 in 11 years (Central Statistical Agency, [CSA] 2000/01-2010/11) compared to over 8000 deaths annually in Turkey (Murat 2009). In financial terms, Ethiopia, one of the poorest countries in the world, loses at least 400 million Ethiopian Birr each year due to road accidents, which was 12 million Ethiopian Birr per year on average, 15 years ago and was the third killing vector (Fanuel 2006). The financial estimation of property damage (excluding human deaths and injuries) is more than 15 million Ethiopian Birr annually on average (CSA 2000/01-2010/11).

### **Statement of the Problem**

Ethiopia stands as one of the worst countries with respect to road safety performance in terms of traffic accident fatalities per 10,000 vehicles (95 in 2007/2008). An assessment, which was conducted on road traffic accidents made in Ethiopia, highlighted that the country has one of the world's worst records, 170 fatalities per 10,000 vehicles. The accident cost analysis made during the study gave an estimated economic cost of traffic accidents between 340-430 million Ethiopian Birr which is 0.8-0.9 % of the gross domestic product in 1999 (ECA 2009). Ethiopian road authority report indicates that in 2007/8 Gregorian calendar. A total of 15,082 accidents occurred in the country, out of

these the number of people killed was 2,161 while 7,140 experienced non-fatal injuries (ERA 2007). In Ethiopia, road traffic accident has been one of the top ten causes of death. For example, in 2013, the number of people killed by road traffic accidents was equivalent to those who died due to malarial (which is the 9<sup>th</sup> cause of death) throughout the country. The costs of fatalities and injuries due to RTAs have a tremendous impact on societal well-being and socio-economic development endeavours. However, public policy responses to this epidemic have been muted at national and international levels (Nantulya and Reich 2002).

According to Fesseha Hailu (2014), the road traffic accident is not only adversely affected the livelihood of individuals but also their family members as it can lead households into poverty via the enduring effects of the episodes: the costs of medical care, treatment and loss of family's income generators. According to Persson (2008), Road traffic accidents have also a gigantic impact on the national economy by consuming the already inadequate resources, damaging invaluable property, and killing and disabling the productive age group of the community.

Because many of the previous findings were seen consequences of RTAs on victims from economic points of view, the issues of psychological wellbeing, social interaction, and social discrimination that road traffic accidents have on victims were got less emphasis. Next, researchers like, Fikadu Mekasha Admassie conducted his research on the title of "Road Traffic Accident: Causes and Control Mechanisms" in Addis Ababa city in 2015 (Gregorian calendar) and Yideg Munana Negash published his research in the journal on the title of "An Assessment on the Impact of Road Traffic Accidents on Human Security in Gedeo Zone (Ethiopia)". In 2015 (Gregorian calendar) studied road traffic accidents in Ethiopia used mixed research approach study, using survey. But still, to describe the consequences of road traffic accidents from the perspective of victims, it is appropriate to use the qualitative research approach independently to understand the consequences of RTAs from the victim's emic perspective.

Finally, even though the issues relating to RTA was repeatedly done in the centre of our country, surrounding Addis Ababa city and southern nation of our country which is highly concentrated on the analysis of road traffic accident in general, rather than highly emphasizing life situation of the victim, we were interested to select a study area under which the issue of consequences of road traffic accidents on victims was not seen by somebody previously. The researcher was motivated to carry out this academic research stemmed from its consequences on the lives and livelihood of victim individuals of Mettu town and due to road traffic accident has long claimed the lives of thousands of citizens. Finally, the consequences of RTA on victims and measures in reducing RTA in the town and measures that have been taken to rehabilitate victims of RTA need to be analyzed to

point out what should be done in a manner that contributes to the reduction of problems of RTA victims.

### **Objectives of the Study**

The general objective of the study is to identify the psychosocial and economic consequences of road traffic accidents on victims of Mettu town, Oromia regional state.

Also, the following are specific objectives of the inquiry:

- To identify the psychological consequences of RTA on victims.
- To describe the social consequence of RTA on victims.
- To identify the economic consequences of RTA on victims.

### **Research Methodologies**

In this research qualitative research approach was employed. The descriptive case study in its design has been adopted for this research. To achieve the goals of this study, first-hand data collection with the help of purposive sampling for the case study and the unstructured interview schedule was used to fulfil the objective and snow-ball sampling technique was adopted to select the respondent. Thus, the open-ended questionnaire was developed based on the objectives of the study. Field observation was also adopted on the availability of road traffic accidents in the study area and focus group discussion was adopted.

This was to describe the phenomenon and the real-life context in which it occurred as it is. This was aimed at collecting relevant data concerning the consequences of RTAs on the psychosocial and economic condition of victims. This would have a principal significance to retrieve data on the current experience of informants in the data collection session.

The sample area of the investigation was selected based on the preliminary assessment made by the researcher. Accordingly, “01, 02, 03 Kebeles” of Mettu towns administration were selected as the areas where victims of traffic accidents live. The researchers selected drivers (Mettu towns), traffic authorities officers, traffic policemen (Mettu towns), and informants from Mettu town referral hospitals for semi-structured and unstructured interviews by applying purposive sampling.

For this study, the researchers determined the sample size based on the data saturation point. The sample study comprised 26 participants from all kebeles of the town (01, 02, 03 kebeles) four (4) Traffic police, four (4) health experts, four (4) experts from town traffic authorities, (8) eight victims of traffic accident, six (6) drivers, and 1 FGD participants were selected accessed across the town.

### Study area and Population

According to CSA (2012), Mettu town is the capital of Ilu Aba Boor since 1978. The town has a latitude and longitude of 80 18'N 350 35'E and an altitude of 1605m. The 2007 Ethiopian National Census shows that the total population of Mettu town was 28,782. From this 14,400 were men and 14,382 were women. Concerning the economic activities of the local community, the majority of the Mettu town inhabitants are relied on agriculture and agriculture-related activities, while they support their life by small trading activities and other livelihood strategies. Thus, agricultural activities accounted for 75 per cent as means of Mettu town livelihood with dominant crop production like maize, sorghum and teff and livestock rising like cattle, sheep, goats and donkeys.

Accordingly, selected victims of road traffic accidents in the town, who had been victims during the time of data collection, were used as the study participant based on conveniently available selection.

### Conceptual Framework

The study was guided by the conceptual framework as shown in figure 1.1

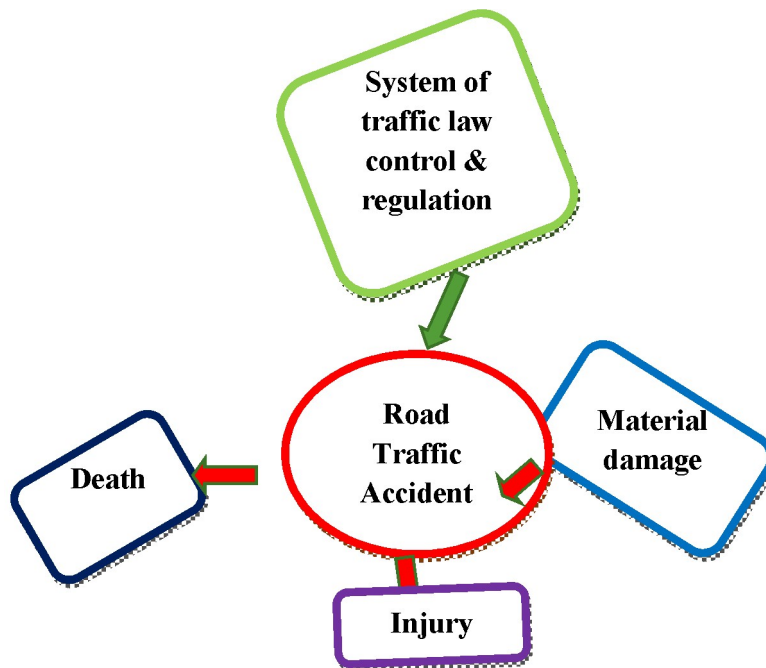


Figure 1:1 Conceptual framework of the study adapted from Jorgesen and Abane (1999) model on road traffic accidents

## Result and Discussion

**Table 1: Socio-economic and demographic characteristics of the participants**

		<i>(participant in number)</i>				
<i>Socio-economic and demographic characteristics of the participant</i>	<i>Categories</i>	<i>Victims of RTA</i>	<i>Traffic polices</i>	<i>Drivers</i>	<i>Health expert</i>	<i>Traffic authority expert</i>
<b>Sex</b>	Male	5	3	5	2	4
	Female	3	1	1	2	-
	Total	8	4	6	4	4
<b>Age (in years)</b>	18- 22	1	1	2	-	1
	23-27	-	-	-	1	1
	28-32	3	1	2	2	-
	33-37	1	1	1	1	1
	Above 38	3	1	1	-	1
	Total	8	4	6	4	4
	<b>Educational level</b>	12 grade not complete	2	-	-	-
12 grade complete		2	-	-	-	-
TVET		1	-	1	-	-
Diploma		2	4	3	2	4
Degree		1	-	-	2	-
Above Degree		-	-	-	-	-
Total		8	4	4	4	4
<b>Occupation</b>	Private worker	3	-	1	2	-
	Unemployed	1	-	-	-	-
	Government officers	4	4	3	2	4
	Total	8	4	4	4	4
<b>Duration of life in the town</b>	< 1 year	-	-	-	-	-
	1-2 years	-	-	-	-	4
	3-5 years	2	-	2	-	-
	Above 6 years	6	4	4	4	-
	Total	8	4	6	4	4

*Source:* Organized by the researcher (2019/20)

## **Psychological Consequences of Road Traffic Accidents on victims in Mettu Town**

One of the interviews held with a male expert of counselling and guidance, 30 years old in Mettu referral hospital noted that:

*Victims of road traffic accidents are suffering not only physically but also psychologically. Due to their behavioural change, short-temper, and anxiety, their family experienced tension. Loss of motivation and interest in activities, irritability and stress caused changes in their personal life. Social isolation, frustration, lack of motivation, decrease in daily activities, indifference to people and activities and boredom were noted for those not returning to normal work routines (From field interview: '19 march 2019/20')*

Interview held with a male health expert, 28 years old (2019/20) noted that:

*The victims were experienced intense fear, helplessness, and loss of control after the accident. High levels of anxiety, depression, irritability and mood disturbances are the most common psychological symptoms among victims' relatives related to the shock of losing their close relatives or loved ones (Source: Field interview, '20 March 2019/20')*

From the above interview with victims, it was very difficult for them to accept that they were failed to achieve the things as they did before the accident and key informants from health experts noted that, the victims were experienced intense fear, helplessness, and loss of control after the accident. High levels of anxiety, depression, irritability and mood disturbances are the most common psychological symptoms among victims' relatives related to the shock of losing their close relatives or loved ones. And even though medication has contributed for victims to cure injuries, they are not fully treated back to the earlier normal psychological condition.

## **Social Consequences of RTAs on Victims**

According to the male victim, 34 years old said:

*I have faced a hearing problem, which made a great impact on the social communication I would have with my family, neighbours and working staff. I can't hear people unless they speak loudly. The other problem I faced is my failure to participate in a community meeting. Also in my working place, I cannot hear working staff which forced them to decide to stop to have interaction with me even on social issues (Source: Interview from the field, '8 March 2019/20').*

From the above interview, it is evident that the social interaction that victims of RTAs make with their surrounding people significantly change from its previous aspect. In this manner, as understood from the above informant, at the time he was suffered from the accident, he eventually lost the social capital that he had within her peer groups, family and the surrounding community.

## **Family Related Problems**

An informant from the male victim, 31 years old of a car accident in the town (2019/20) noted that:

*For the sake of taking care of me, family members have reduced their work time to support me at home, due to I was unable to move from place to place in the house, I need one family member of the family to go outside of the home, this made a great impact on my family daily activity.*

From the above interview, it is evident that, the ability that victims of RTAs make to move from place to place significantly change from its previous aspect due to he was becoming disabled.

Similarly, another male victim of RTA, 43 years old noted that:

*Since I was the victim of a car accident the life of my family was becoming under question, due to that I was not afforded to buy my children's needs as previously, particularly for my child who learned at university I didn't send money as I did before. The accident has an impact on my child who has been learning at university (Source: Field interview: '15 March 2019/20').*

Key informant health expert stated that:

*"Victims may have exposed to as a minimum skin scare or scratch on their body this exposed them to stress and mental illness while they recall their earlier body condition with the recent deformed or scared body after an accident."*

All in-depth interviews with victims show consistent responses on how victims observed the new situation of becoming permanently disabled. They mentioned that it was very difficult for them to accept that they were without one leg or other distorted body and skin damage. They revealed that life became meaningless to them; because they had experience on how disabled people suffered in their society.

### **Medical Treatment for Victims of RTAs**

In all interviews with victims and their families, participants pointed out that a big problem was high prices for medical treatment. It was added by participants that their work efficiency was going down because their artificial limbs that facilitated their mobility needed to be replaced and they could not afford it.

One participant (female-widow), 28 years old said that:

*Treatment for RTAs victims is very expensive and many families cannot afford it. She added after the car accident, she attended five surgeries that cost a lot of money and to manage that her children decided to sell a piece of land they owned.*

Unfortunately, through all interviews and FGD, we did not come across a victim that was fully covered by exemption although they all complained about financial constraints that have resulted in failure to pay for extra surgeries required. Participants also said there was a long procedure for exemptions and sometimes they could not wait because they were suffering from pains. They said they had to pay some money to get a letter from the municipality and the municipality leader was responsible for the assessment of illegibility. Participants added that the whole procedure is surrounded by a complex environment.



## **Economic Consequences of Road Traffic Accident on Victim**

The key informant female health expert, 32 years old said that:

*Irrespective of the cost of health care and reintegration, injured peoples bear additional costs. These all problems can deprive an individual victim. Road traffic accidents can result in dependency on the family for financial support and routine physical care which expose an additional burden on the supporting family members supporting cost (Source: Field interview, '26 April 2019/20').*

Similarly, the FGD Participant (female) specifies as many children of RTAs victims have failed to continue with education because of the lack of school fees.

Accordingly, an interview held with the family of the victim of car accident aged 33 informed that:

*I am unemployed, I didn't have any income and we didn't get insured from the owner of the car for an accident that happened on her 18 year aged child. So we felt a scarcity of money to purchase drugs provided from doctors for her child and I became stressed to overcome the budget problem (Source: Field interview, '28 April 2019/20').*

All of the interviewed victims informed that, after the accident occurred they failed to cope up with the budget problem, particularly if the victim was the breadwinner of the family. Even to get cents for drugs provided from hospitals and failure to pay education fees and develop a sense of dependence on their relatives. It was difficult to figure out the dependence response because the victims said that they were willing to engage in different activities that will enhance the livelihood of their families. They still perceive themselves as important people who can contribute to the development of the nation if given the opportunity.

## **Job-related Consequence of RTAs on Victims**

One informant from the victim male, 25 years old specifies that “The car accident leads him to poverty. He informed that many RTAs victims lose their jobs because it looks long time to recover.” Unfortunately, the victims said that “after accidents, they were worried about losing jobs and business which impose difficulties on how to cop.” One victim (female) said, “even if the victim was employed after RTA a lot of money was used without means to replace it.”

## **Conclusion**

According to the in-depth interview with the victim of RTAs (road traffic accidents) of the study area, informed that to list some, first, creates a huge yoke on the economy of households especially when the productive member of the family becomes the victim of RTA. The sudden death of a breadwinner often places major and long-term responsibilities on other family members. The direct costs incurred by the family are for medical expenses, i.e., includes pre-hospital, hospital and post-hospital for survivors, legal expenses etc.

likewise, RTAs present loss to the economy of developing countries, like Ethiopia. The death or injury of the productive section of the society negatively affects the value of production that would have been realized by the casualties.

The in-depth interview conducted on the victims of RTAs noted there is a poor controlling system both in giving licenses for the drivers and in enforcing traffic regulations. In addition, some drivers are teenagers less than eighteen years of age. This could get great attention from the concerned authority and stakeholders who have been done on the issues related to minimization of RTA in general and victims of RTAs in particular. Finally, the result obtained from victims of RTAs has been said that even though different social and community institutions in the areas existed in the study area. Nothing has been done with rehabilitation action to minimize the consequences of RTAs on victims in a structured manner from social institutions, government and non-government institutions.

### Recommendations

The following feasible recommendations are forwarded based on the literature, objectives and the findings of the study-

- The town traffic authorities should enforce traffic rules and regulations properly.
- Different social and community institutions in the areas such as “Idir” should be doing more in minimization of problems of victim’s in the town.
- Similarly, governmental organizations take the issues into account the consequences of RTAs and do more in collaboration with Nongovernmental organizations who have been done on victims of RTAs particularly those physically disabled.
- In order to support the disabled victims of the town, the government, non-government organizations and the concerned bodies within the area must provide rehabilitation services and psychological therapy.

### References

- Alkire, 2003, cited in Yideg Munana Negash. 2015. An Assessment on the Impact of Road Traffic Accidents on Human Security. *Journal for Studies in Management and Planning* 1:134-156.
- Ameratunga S., Martha Hajar and Robyn Norton. 2006. Road-traffic injuries: Confronting disparities to address a global-health problem. *The Lancet* 367(9521): 1533-1540.
- Central Static Authority Report in Ethiopia 2012. Ethiopia: Addis Ababa.
- Fanueal, Samson. 2006. *Analysis of Traffic Accident in Addis Ababa, Traffic Simulation*. Ethiopia: Addis Ababa University.
- Federal Democratic Republic of Ethiopia*. 2007. Ethiopian Roads Authority, Road sector development program, Second draft Final report. Addis Ababa, Ethiopia.

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- Fesseha Hailu Mekonnen and Sileshi Teshager. 2014. Road traffic accident: The neglected health problem in Amhara National Regional State, Ethiopia. *The Ethiopian Journal of Health Development* 28(1):3-10.
- Persson A. 2008. Road traffic accidents in Ethiopia: Magnitude, causes and possible interventions. *Journal of Advances in Transportation Studies (ATS)* XV:5-16.
- Silvestre, O. 2002 cited in Fekadu Mekasha Admassie 2015. Road Traffic Accident: causes and control Mechanisms. Addis Ababa.