Experiences and Coping Strategies of People with Physical Injuries due to Road Traffic Accident: The Case of Patients Admitted to Tikur Anbessa Hospital

By

Betelihem Getachew Tessema

A Thesis Submitted to the School of Social Work in Partial Fulfillment of the Requirements for the Degree of Master of Social Work

Advisor: Messay Gebremariam (PhD)

Addis Ababa University

College of Social Science

School of Social Work

August 2021

Addis Ababa

Experiences of People with Physical Injuries due to Road Traffic Accident

By: Betelihem Getachew Tessema

A Thesis Submitted to the School of Social Work in Partial Fulfillment of the Requirements for the Degree of Master of Social Work

Advisor: Messay Gebremariam (PhD)

Co-advisors: Dr. Biruk Lamisso

Dr. Tsegazeab Laeke

Addis Ababa University,

School of Social Work

August 2021

Addis Ababa, Ethiopia

ADDIS ABABA UNIVERSITY

COLLEGE OF SOCIAL SCIENCE

SCHOOL OF SOCIAL WORK

This is to certify that the thesis prepared by Betelihem Getachew Tessema on the title, Experiences and Coping Strategies of People with Physical Injuries due to Road Traffic Accident: The Case of Patients Admitted to Tikur Anbessa Hospital submitted to the School of Social Work for the Partial Fulfillment of the requirement for the Degree of Master in Social Work complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by:

Advisor	Signature	Date
_____	_____	_____
Examiner (Internal)	Signature	Date
_____	_____	_____
Examiner (External)	Signature	Date
_____	_____	_____

Declaration

I, Betelihem Getachew, declare that this work Experiences and Coping Strategies of People with Physical Injuries due to Road Traffic Accident is my original work and all the sources that I have used or quoted have been indicated and acknowledged by means of reference and this work has not been submitted before by any others at any institutions.

Name: Betelihem Getachew

Signature: _____

Place: Addis Ababa University, Ethiopia

Date of Submission: _____

Acknowledgements

I would like to express my sincerely thanks to my advisor Dr. Messay G/mariam (PhD) and co-advisors Dr. Biruk Lamisso and Dr. Tsegazeab Laeke for their continuous support throughout preparation of this thesis starting from the proposal. I also would like to extend my appreciation to staffs of Tikur Anbessa hospital for their assistance in introducing me to the participants and reviewing their chart.

My gratitude also goes to Addis Ababa University, School of Social Work for providing me the opportunity to conduct the research.

Finally, I would like to express my appreciation for study participant for their willingness to participate and genuine responses.

Acronyms and Abbreviations

AIDS – Acquired Immune Deficiency Syndrome

AU – Africa Union

CDC – Center for Disease Control

CSA – Central Statistics Agency

DALY - Disability-Adjusted Life Years

GDP – Growth Development Program

GNP – Growth National Product

HIV – Human Immune Deficiency Virus

KM/hr. Kilometer per Hour

MEWS - Modified Early Warning Score

RTA – Road Traffic Accident

RTI – Road Traffic Injury

TASH – Tikur Anbesa Specialized Hospital

UN – United Nations

USD – United States Dollar

WHO – World Health Organization

Table of contents

List of Tables

Abstract

Physical injuries due to road traffic accident are increasing every day. The deleterious effect of physical injuries due to road traffic accident on an individual's psychological condition as well as family and social relationships is undeniable. Even though the problem demands comprehensive interventions, much has not been done towards supporting people with physical injuries. Moreover, studies conducted using quantitative research methods focused on cause, magnitude, prevention, outcome of road traffic injury. Studies emphasize on numerical measurements which does not indicate experiences and coping strategies of victims of road traffic accident. Thus, this study explored experiences and coping strategies of people with physical injuries due to road traffic accident using qualitative phenomenological study. Ten (10) participants with physical injuries were selected using purposive sampling. In-depth interview was applied as data collection method and data were analyzed thematically. The findings of this study showed that people with physical injuries are receiving support from loved ones i.e., family, friends, other patients, neighbors, and colleague. In addition, they are receiving incomplete treatment, which is sole, routine and delayed. Uninformed medical decision (before and after a procedure) is also the features of treatment support that they are receiving. For them admitted in a hospital is a negative experience. They are using support from loved ones; learn from others, focusing on positive and personal life experience as coping mechanism. Identifying support sources can be effective in their adaptation with the situation and improvement of the quality of their life moreover; known victims‟ experience of staying in hospital can help to improve multifaceted support services. The study highlights the importance of social work profession in the area and related issues.

Key words: Road traffic accident, people with Physical injuries, support

CHAPTER ONE: INTRODUCTION

1.1. Background of the study

Road traffic injury is a major but ignored public health problem that requires combined interventions for actual and workable prevention. Worldwide, an estimated 1.35 million people are killed in road crashes each year and as many as 50 million are injured (WHO, 2018). The same report indicates globally, road traffic accident are categorized eighth among the leading causes of disability.

In addition, WHO (2013) specified that a considerable number of RTI victims end up with permanent disability through amputation, and spinal cord injury. Improvement has been attained in important areas such as legislation, vehicle standards and improving access to post-crash care. This progress has not, however, occurred at a pace fast enough to compensate for the rising population and fast motorization of transport taking place in many parts of the world (WHO, 2018). In addition, by the year 2030, injuries arising from RTIs are predicted to be the fifth leading cause of disability-adjusted life years lost worldwide (WHO, 2009).

African countries had the highest mortality rate, with 28.3 deaths per 100,000 populations. The problem is increasing at a fast rate in African countries due to rapid motorization and other factors. The most economically active people (aged 15–59) are at the greatest risk of dying as a result of RTI. For this age group, road traffic injury affected more than three times as many males as females. Overall, 5% of deaths among males aged 15–59 are attributable to road traffic injury, but this percentage rises to 6.5% for males in the 15–29 age groups in Sub-Sahara Africa (WHO, 2015). Deaths due to road traffic injury among males aged 15–59 surpass those due to malaria, diabetes mellitus and respiratory or digestive diseases. African road traffic deaths happen among pedestrians (Ogendi & Ayisi, 2012).

It has been regarded that many road traffic injury can be prevented and that road safety is essentially a development issue for many nations (Mutooro et al., 2010; Tintinalli et al., 2004; United nations, 2011). In Ethiopia a road crash fatality rate is 114 deaths per 10000 vehicles per year. Officially, 81% of crashes are attributed to driver error. Driver impairment is rarely recorded as a contributory factor. Substance use is a major cause of driver error and crashes (Ethiopian National Road Safety Coordination Office, 2006). Like many low-middleincome countries, Ethiopia has large number of road traffic deaths, with approximately more than 25 people per every 100,000 people killed in road crashes (WHO, 2015).

Road traffic injury has been considered to be one of the primary causes of mortality rates in different countries and Ethiopia is not an exception that the country has one of the world‟s worst injury records, 170 fatalities per 10,000 vehicles. From the total road traffic accident occurring every year, more than 20% are fatal. The high percentage of fatalities indicates the critical need for pre-hospital and emergency medical services. The alarming increasing trend of road traffic accident and fatalities are at 10 and 17% per year respectively. The injury cost analysis was estimated to be 340-430 million Ethiopian Birr (ETB) per year which is 0.8-0.9% of the gross domestic product (Chalya et al., 2010; Solagberu et al., 2006; Khare et al., 2012, Muvuringi, 2012).

Besides loss of life due to road traffic injury is attributed to, medical cost, physical pain, permanent disability and travel anxiety as well as it affects household income and national economy and also reduces quality of life. Therefore, road traffic injury affect not only the health of individuals but also their family members, as it can drive household into poverty when they struggle to cope with the long term consequence of the events, including the cost of medical care, rehabilitation and loss of family.

Bahiru et al (2012) in a study conducted to evaluate the efficacy of the Perkins traction in the treatment of adult femoral shaft fractures mentioned that road traffic accident

was the most common cause of injury, found in nearly half of the patients. Car accident is cause of injury in patients with compound fracture wounds (Yishak & Biruk, 2009). Similarly, Tsegazeab et al (2019) showed that road traffic accidents were one of the commonest causes of severe head injury causing a high number of mortality and disability. Tequam et al (2016) revealed that road traffic accidents were the number one causes of head injury causing disability in a study entitled "Computerized Tomographic Findings and Injury Pattern in Patients with Traumatic Brain Injury at Tikur Anbessa Specialized Hospital,Addis Ababa".

As indicated in different literatures physical injuries caused by road traffic accident are rampant in our country even though considerable prevention, treatment and rehabilitation efforts are not done towards this problem. Especially in Ethiopia support for people with physical injuries due to road traffic accident at facility level is not adequate or in some extent it is absent (researcher‟s observation). Moreover, studies on road traffic accident focuses on numerical measurements of road traffic accident, they did not attempt to study victims experience after the accident. Thus, this study explored experiences and coping strategies of people with physical injuries due to road traffic accident. The study was conducted in Tikur Anbessa Specialized Hospital surgical and orthopedics wards Addis Ababa Ethiopia.

1.2. Statement of the Problem

Globally injuries due to road traffic accident are life threatening public health problems that represent 12% of global burden of diseases and 9% of all deaths, a part from the leading loss in human lives, the economic burden of road traffic crash causes a tremendous amount of losses in finance and property damage (WHO, 2004). Similarly Ortho and Power (2007) indicated road traffic accident is the main cause of death, injury and permanent physical injuries and restricts individuals‟ cognitive, behavioral, emotional and physical functions.

Injuries due to road traffic injury create a high economic and social burden to the victims and their families by limiting their physical and mental activities.

Incidence of Road Traffic Injury and Associated Factors showed the incidence of road traffic injury in the emergency department of Tikur Anbessa Specialized Teaching Hospital as 36.8% which is high. Being a farmer, conflict with family members, psychological and financial problem, and alcohol drinking are found to be significantly associated with road traffic injury (Bewket, 2014). Even if the extent of the problem is more serious in developing countries, injuries and mortalities because of road traffic injury has been foremost health problem both in developing and developed countries (Kopits, 2004).

Road safety in the WHO African region the facts(2013) reported that while the African Region possesses only 2% of the world‟s vehicles it contributes 16% to the global deaths. Nigeria and South Africa have the highest fatality rates in the region. More than one in four „deaths in the African Region occur on Nigeria‟s roads, and with six other countries; Democratic Republic of Congo (DRC), Ethiopia, Kenya, South Africa, Tanzania, and Uganda, are responsible for 64% of all road deaths in the region.

Downing et al(1991) in his study about pedestrians safety in developing countries stated that among the most prominent factors, the human factor of which drivers' errors takes the majority of the blames as it is evidenced in Botswana 94%, Ethiopia 82%, Philippines 85%, Malaysia 87% , Pakistan (9 1 %), India (80), UK (95%) and Zimbabwe 89 %.

Kazeem (2018) points out; there‟s a significant link between the risk of road traffic death and a country‟s income level. As mentioned in this article a major of Africa countries have lax rules on speed limits, child restraints, and drink driving. Meanwhile, the health care shortcomings in many Africa countries means that those who survive traffic accidents have no guarantee of adequate post-crash care.

Road traffic accident results from a combination of factors related to the components of the system including roads, the setting, vehicles and road users, and the way they interact. Certain factors appear to be directly related and contribute to the occurrence and effects of collision. Some causes are immediate, but they may be underpinned by medium-term and long-term structural causes (David et al. 2005).

Miller (2000) stated injuries reported as being minor at the time of crash can often lead to a broad range of problems including physical impairments and disabilities as well as behavioral problems and psychological distress. Hailemichael (2015) found out that lower extremity is the majority injury site followed by upper extremity injury. Of all victims of road traffic injury reaching hospital 12.5% survived with long term disability on discharge.

Adisu et al (2019) based on a cross sectional retrospective study of two years in five hospitals in Addis Ababa about patterns of bone fractures mentioned that the majority of RTI victims were young adults in their most reproductive and productive years. In this study most of the RTI victims were males. Moreover as mentioned in the study three commonly predominant affected anatomic regions by RTI are extremities, head and chest. Half of the fractured patients had an isolated/single bone fracture. Multiple areas were injured in about one fifth of the patients. In addition, Daniel (2009) mentioned that road traffic accidents were accountable for almost half of the fractures. In this cross-sectional, institution based prospective study in surgical and orthopedics emergency departments of Tikur Anbessa hospital the first causes of fracture remained the same and this was noted by the two decade analysis for trends of disability following injury.

According to Biruk (2006) hospital based retrospective study, road traffic accident are the uppermost cause of permanent musculo-skeletal disability. The trends have kept progressively increasing most of the RTAs are pedestrian injuries and were caused by commercial vehicles and are feasibly preventable.

Daniel (2010) on a study over six month‟s period several causes responsible as to the causes of trauma were identified. Road traffic injury constitutes the largest proportion of injured patients who attended the surgical and orthopedic outpatient emergency department of "TikurAnbessa". Chalachew et al, (2020) declared that RTI is the leading cause of extremity fractures and the most common RTI involved Minibuses

Shanthi (2003) reported that resources for acute trauma care and rehabilitation are scarce and the socioeconomic implications of disability in impoverished communities due to road traffic accident are significant. Data on the health and social consequences of crashes are vital to promote adequate resource allocation for injury control initiatives as well as monitor the impact of interventions.

Daniel (2010) on his study the psychosocial effect of road traffic injury indicated that road traffic injury has both social and psychological effects on victims. In his paper the social aspect of road accident include effects on victim‟s social relations, effects on work, effects on body image, health effects, and effects on family relation. Psychological effects of car accident covered victims feeling or emotional reaction. And, the long term effects of car injury that include, depression, guilty feeling, anger, the development of hostile behavior and fear to travel.

Most of the above studies used survey, secondary data analysis and different statistical equations and software to measure, analyze and to develop traffic management system and safety evaluation. However except one study none of them tries to address or identify the problem from victims‟ side after road traffic injury especially during hospitals admission.

Physical injuries due to road traffic injury is most frequent and prevents individuals from performing their work duties or engaging in typical daily activities in which they participated before road traffic injury. Furthermore, physical injuries are ongoing and will affect them for the rest of their life and can range from partial to total.

A broad and integrated approach to support victims can mitigate the short and long term effects of experiencing road traffic injury and can help those affected return to functional and independence at home and at work. Many of the studies focus on prevalence, magnitude, incidence, risk factors, outcome, trend, and burden and prevention mechanism towards road traffic injury. The objectives of the studies are to decrease number of road fatalities, the cost of road traffic accident as well as to develop traffic management system through identifying corrective measures. Moreover the majority of the studies focus on quantitative measurement of road traffic injury; they used number-oriented data. They didn't attempt to understand the opinions and experience of road traffic injury victims after the accident scene. Unlike the above studies this study focused on post-crash experiences of victims during hospitalization and used language-oriented data. Thus this study explored experiences and coping strategies of people with physical injuries due to road traffic accident to provide supplementary insights that can't be collected through quantitative research. The participants of this study were people with physical injuries and who are admitted to Black Lion Hospital for medical care. It emphasized on the following research questions:

1.3. Research questions

- What are the existing support schemes provided for victims with physical injuries due to road traffic accident?
- What are in-patient experiences of people with physical injuries due to road traffic accident?
- What are the coping strategies do victims of road traffic accident develop when they face physical injuries?

1.4. Research objectives

1.4.1. General objective

The general objective of this research was to assess experiences and coping strategies of people with physical injuries due to road traffic accident

1.4.2. Specific objectives

1. To examine the existing support schemes provided for people with physical injuries due to road traffic accident at Tikur Anbessa Hospital.
2. To examine in-patient experience people with physical injuries due to road traffic accident.
3. To assess the coping strategies used by people with physical injuries due to road traffic accident.

1.5. Significance of the Study

The study assessed the experiences and coping strategies of people with physical injuries due to road traffic accident. Nowadays road traffic injury is a huge problem in Ethiopia. Every day we are exposed to feasible traffic accidents when we set out from our home to visit some place. As a result, people become physically injured and hindered from performing their normal work duties or engage in daily activities in which they participate before.

Furthermore, physical injuries are ongoing and will affect the life of individuals, family and community, thus other than medical care this problem needs comprehensive support in order to help victims to cope with injuries. Identified support for road traffic injury victims with physical injuries can help for awareness raising and to design appropriate medical, rehabilitation and life adjustment intervention strategies to work with victims. Similarly, it also provides further research questions and can help as a supplementary research material for future researchers. Besides, it can fill some of the research gaps indicated earlier in this paper.

This thesis also gives an additional view towards victims‟ of road traffic accident. It also gives an implication for the social work profession's role in assessing and providing intervention services for physically injured victims of a road traffic accident. To this end, the study promote the social workers and other related professionals, additionally, the finding of this study can also be helpful for focused orthopedic and other surgical management of patients; eventually minimize the morbidity, disability, and mortality of the victims. This study outcome can help trauma centers to take steps toward health promotion and recovery of RTA victims.

The study defines the subjective understanding of victims of road traffic accident. It emphasized on perceptions and experiences of victims on the support that they are getting during hospital admission. The exploration of experiences and coping strategies can contribute for the health care service system and the community by suggesting the effects of support on victims of road traffic injury.

1.6. Operational definitions of terms

Admitted: A person who is hospitalized for a minimum of one month and above because of road traffic accident.

Coping: strategies develop by victims of road traffic accident to overcome the problem that they are facing.

Pedestrian: a person involved in an accident that was not at the time of the accident riding in or on any mechanically or electrically powered device.

Physical injuries: an injury which impairs the physical ability of a person to perform his/her normal work or non-occupational activities.

Road Traffic Accident: road traffic accident is an incident on a way or street open to public traffic

Support: the act of giving care, assistance, for the purpose of this study support defines as provides comfort, encouragement and care or all rounded support.

Victims: someone injured as a result of road traffic injury.

1.7. Organization of the paper

The Study is consists of six chapters. The first chapter introduces the study with general introduction, statement of the problem, objective of the study, basic research questions, significance of the study, limitation of the study and standard definition of basic terms. The second chapter discussed about the review of related literatures i.e. General overview of road traffic injury, Global and Regional Trends of Road Traffic Accidents, Impacts of Road Traffic Accident, Outcome of Road Traffic Accident, Global measures taken to reduce road safety, measures of RTA in Africa, Theories of road traffic accident causes , Road Traffic Accidents and Development, Road Traffic Accident in Ethiopia, the third is encompasses research methodology, data source, data collection techniques, Data Processing. The fourth chapter data presentation and analysis; the fifth chapter embraces discussion and the final chapter presents conclusions and implication.

CHAPTER TWO: LITERATURE REVIEW

This study will assess the existing support schemes for victims with Physical injuries caused by a road traffic accident. The purpose of this chapter is to provide some relevant literature, researches, theories and discourses that conducted in the area of a traffic accident.

2.1. General overview of road traffic injury

Road traffic injury (RTI) is one of the major causes of patient admission, which increases global disability-adjusted life years (DALYs) population(Murray et al ,2010) and health care expenditure ($518 billion USD per year) (Finkelstein ,2006). According to 2013 World Health Organization (WHO) report, nearly 20–50 million people were injured due to RTI (WHO, 2013), which attributes to an occurrence of 1.25 million road traffic deaths per year. The burden of DALYs is also apparent and listed under the top ten leading causes of disease (Toroyan, 2009).

The most shocking and emerging reality of RTA is that, it will continue affecting the survival of several lives across the planet. Consequently, remains pessimistic in road traffic accident cases where it projected that, road traffic accident will be the fifth – leading cause of death globally by 2030.

2.2. Global and Regional Trends of Road Traffic Accidents

Since the 1960s and 1970s, there has been a decrease in the numbers and rates of fatalities in high-income countries such as Australia, Canada, Germany, the Netherlands, Sweden, United Kingdom (UK) and the United States of America. At the same time, there has been a pronounced rise in numbers and rates in many low-income and middle-income countries, overall downward trend in road traffic deaths in high-income countries, whereas many of the low-income and middle-income countries have shown an increase trend since the late 1980s (WHO, 2004).

2.3. Impacts of Road Traffic Accident

All countries in the world are currently affected by RTA. Although the effects of RTA vary from one country to the other, from nation to nation, it should be everybody‟s concern. Some of the major impacts of RTA discussed by different organizations and scholars are conversed in the following sub-sections.

2.3.1 Economic and Social Impact of Road Traffic Accident

Naci et al (2008) mentioned that, in economic terms, the cost of road crash injuries is estimated at roughly 1% of Gross National Product (GNP) in low-income countries, 1.5% in middle-income countries and 2% in high-income countries. The direct economic costs of global road crashes have been estimated at US$ 518 billion, with the costs in low-income countries – estimated at US$ 65 billion – exceeding the total annual amount received in development assistance.

2.4. Outcome of Road Traffic Accident

According to the study done in Spain, 15% of those who survive a road traffic accident were treating in hospitals as in-patients (Dobranskyte, 2007). Another study revealed that out of 150 RTA victims 65 (43.33%) were discharged,10(6.67%) required urgent operation, admitted to ward and intensive care unit (ICU) account 57 (38.00%) and 16 (10.67%) respectively and for two (1.33%) cases the outcome were death (Shah & Jarwani, 2014).

A cross-sectional study conducted at hospitals Wolaita Zone, SNNPR, showed most of the victims presented to the hospitals within 24 hours .Of all victims reached hospital, 23 (6%) died, (12.5%) survived with long- term disability on discharge and 313 (81.5%) survived without long-term disability on discharge (Hailemichael & Suleiman, 2015).

A cross sectional study done using retrospective at emergency department of Zewuditu Memorial Hospital: indicate more than half of RTA cases the severity of patients categorized under yellow modified early warning score (MEWS). Related to this outcomes of

admission were 68%,17%,14% and 1% cases were discharged, hospitalized, referred and died respectively(Getachew & Ali ,2016). A study conducted in Dilchora referral hospital, Dire Dawa on treatment outcome of road traffic accident reported that 90.5% victims were manage as conservative while 9.5% of them were managed surgically. About 75.6% of patients were improving without any sequel, 15% were discharging with some disabilities and 9.4% of them were dead of RTA (Negesa & Mohammed, 2017).

2.5. Global measures taken to reduce road safety

Following WHO‟s (2004) publication towards road safety worldwide, United Nations resolution entitled "Improving global road safety", which recognized the need for the UN system to support efforts to address the global road safety crisis. In the resolution, the Assembly invited the WHO, to work cooperation with the regional commissions, to act as a coordinator on road safety issues within the United Nations system, thus on 10 May 2010.

The Assembly adopted resolution which proclaimed the period 2011–2020 as the Decade of Action for Road Safety, the plan to reduce the level of road traffic fatalities and save five million lives around the world by increasing activities conducted at the national, regional and global levels (UN, 2011).

2.6. Measures of RTA in Africa

To reduce the problem countries in the region has made different efforts both unilaterally and multilaterally as a region. Regionally the AU has its own Africa Decade Plan of Action with the aim of reducing road traffic fatalities by 50% in 2020 and it is also aimed at preventing about one million severe injuries per year (WHO, 2013).

2.7. Road Traffic Accidents and Development

According to Kopits &Cropper (2005) road traffic accidents can adversely affect economic development just like communicable disease such as HIV/AIDS, tuberculosis and malaria and thus should be considered as development issue. Some scholars argue that as income per

capital increases and able to enhance the disposable income of households, the number of vehicles increases on the road of the countries that experience such events. For example, researches find that at very low levels of income road traffic fatalities per (100,000) person(s) augment with income (given that motorization goes up) up to a certain threshold, after which countries seem to be able to invest in safety measures (including safer cars) and possibly in measures that could bring behavioral changes to reduce traffic fatalities. Given poor road infrastructures (may be due to resource scarcity or misuse), lack of sound road safety regulations, and weak enforcement of road traffic laws, the increment in the number of vehicles (which is not accompanied by adequate improvements in infrastructure and road safety legislation) leads to mismatch between public expenditure required to accommodate increased number of vehicles and increase private expenditure on vehicles. This discrepancy in turn leads to high road traffic accidents which could be meticulously understood via the lens of development (Eshbaugh et al, 2012).

2.8. Road Traffic Accident in Ethiopia

Most of the road deaths in developing countries involve vulnerable road users such as pedestrians and cyclists. In Ethiopia, pedestrian injuries account for 84% of all road traffic fatalities compared with 32% in Britain and 15% in the United States of America. In contrary, in the heavily motorized countries, drivers and passengers account for the majority of road deaths involving children (Bunn & Collier et al, 2003).

Similarly, Mekonnen (2007) quoted that, RTA in Ethiopia is a serious problem. The RTA death rate is estimated to be 130 per 10,000 vehicles. Of the total victims of RTA who lost their lives, over half are pedestrians, out of whom 30% are children. In Ethiopia, one among five people injured dies due to RTA. Based on a five-year average records, of the personal injury accidents, 81% are caused due to drivers error, 5% due to vehicle defect, 4% due to pedestrian error, 1% due to road defects and 9% due to other problems in Ethiopia.

Studies further shows that the professional drivers are involved in 88% of the fatal accidents. Special purpose vehicles and motor bicycles cause 8% of such accidents. On the other hand, automobile drivers have very good safety records with only 4% of the fatal accidents, which is equivalent to a rate of 12 fatal accidents per 10,000 vehicles.

Discussing the National Road Safety Coordination Office of Ethiopia, the main underlying reasons for the frequent RTA occurrences and severe impacts of RTA in Ethiopia are improper behavior or lower skill of drivers, poor vehicle technical conditions, animals and carts using the highways, pedestrians not taking proper precautions, poor traffic law enforcement, poor emergency medical services and Insufficient safety considerations given in road development.

In addition to this Segni (2007) added another responsible reasons of RTA occurrences in Ethiopia like driving without respecting right-hand rule, failure to give way for vehicles and pedestrians, overtaking in snaky horizontal curves, following too close to the vehicle in front, improper turning and speeding. These causes contribute to 73% of the total accident in the year 2004/05 in Ethiopia but the other possible reasons accounted for less than 27%. It would be impossible to attach a value to each case of human sacrifice and anguish, add up the values and result a figure that captures the national social cost of road crashes and wounds.

Conversely, the economic expenses of road traffic accidents are, obviously, a heavy burden for the national economy. In addition to this UN (2009) added that the economic costs of road crashes and injuries are estimated to be 1% of Gross Domestic Product (GDP) in lowincome countries such as Ethiopia. In another stance , Mohammed (2011) put his findings of the cost of RTA in Ethiopia on the basis of the Ethiopia‟s data and economic figure of 2009/10, as the cost of damage only, slight, serious and fatal road traffic crashes were 327.12 million, 204.65 million, 619.38 million, and 716.02 million ETB respectively. This represents

the total national economic loss resulting from road accidents to be estimated as ETB 1.867 Billion which is equivalent to 145.07 million United States dollars (USD) considering the exchange rate of the same year, or approximately 0.49% of the GDP of the country in the same year.

2.9. Summary and Conclusion of the Chapter

In conclusion literature showed that the most shocking and emerging reality of RTI is that, it will continue affecting the survival of several lives across the planet. There has been a noticeable rise in figures and rates in many low-income and middle-income countries, overall downward trend in road traffic deaths in high-income countries, whereas many of the lowincome and middle-income countries have shown an increase trend.

Literature also indicated risk factors such as human factors like drinking behavior, non-use of seat belt, mobile phones, age of drivers and speed and many other that contribute to road traffic crashes. Identifying these factors can help for interventions that can reduce the risks associated with those factors. As indicated in the literature the quality and standard of roads, environment and road users‟ information can also cause RTA.

The other result indicated by literatures is that economic and social impact of road traffic accident worldwide, in Africa and Ethiopia. Literature mentioned that permanent disability and death are the major outcomes of RTA which is the basic premises of this study. Since all the studies used quantitative research design and statistical analysis it is inconvenient to adapt method. Thus, this study deployed qualitative study design that is elaborated in the next chapter.

CHAPTER THREE: METHODOLOGY

3.1. Paradigm of the Research

A paradigm is a design, structure, and framework (Olsen & Lodwick, 1992).This study applied interpretive paradigm. Fard & Fazliogullari (2012) explained Interpretive; also called constructivist paradigm is a paradigm that aims to understand people and social phenomenon Interpretive researchers aim at exploring and understanding phenomenon inductively and believe that the social event is understood from the point of the individuals who are part of the ongoing action being investigated (Krauss, 2005; Cohen, Manion, et al, 2007; Fazliogullari, 2012). This study explored the existing support schemes that people with Physical injuries are receiving and to understand their in-patient experience as well as coping mechanism to sudden Physical injuries

3.2. Research Design

The study deployed an exploratory research design; which helped to explore the experiences and coping strategies of people with physical injuries due to road traffic accident. According to Given (2008) exploratory design is appropriate under two main conditions, when the area of the study has received little attention or not studied. Kreuger & Neuman, (2006) further pointed out exploratory research frequently used qualitative data which help to be familiarized with the basic facts, settings and concerns. It also creates general mental picture of conditions and formulate precise questions for future researchers to answer. As indicated earlier in this study, the numerical measures of vehicular accidents do not provide information regarding experiences of victims. In this study, the researcher used an exploratory design to explore the experiences and coping strategies of people with physical injuries due to road traffic accident.

For this study descriptive phenomenology is applied due to the fact that little is known about the research problem under investigation. The recommended data collection

method in descriptive phenomenological design is in-depth interview with semi-structured questions Phenomenology, as a qualitative design, suits the inquiry of exploring the perception and experience of participant towards a phenomenon.

Phenomenology allowed exploring the lived experience of the victims from their point of view. Phenomenology studies conscious experience as experienced from the subjective or first person point of view." The focus of phenomenological research is in exploring the lived experience of people as individually or shared meaning. Phenomenology enables to develop interview questions in a way that allow interviewees to express their own views on phenomena under study (Patton, 2002). To answer the research questions, I employed qualitative data collection methods and analysis.

In depth interview was conducted to gather the data for this study. The use of qualitative research helps to understand the given research problem or topic from the perspective of study participants. And, it gives more flexibility and nonlinear path than quantitative research design. The strength of qualitative research lies primarily from its inductive approach, its focus on specific situations or people and its ability to generate culturally specific and contextually rich data (Guest, Mack, Macqueen, & Namey 2005). In general, qualitative research design was used to explore and understand the experiences and coping strategies of people with physical injuries due to road traffic accident.

3.3. Data source

This study used primary and secondary source of data. Primary data obtained through interviewed participants on the various interest of this study. Secondary sources gathered from participants medical charts.

3.4. Study setting

The study was conducted at one the selected referral hospitals in Addis Ababa which serves the country as referral care institution, provides higher education in different health and

related fields including specialty and sub-specialty for many professionals of the country as well as neighborhood countries and known to be Trauma Centers in the city and in the country as well. The hospital has more than 200 health professionals composed of doctors and nurses in each ward. Namely: Tikur Anbessa Specialized Teaching Hospitals.

3.5. Sampling technique

Purposive sampling was used as it has allowed me to select participants based on their particular experience and knowledge of the study questions. In addition, it serves the intended purpose of the study. Creswell (2007) explained that the purposeful sampling strategy involves the researcher selecting the participants purposively since they can understand the phenomenon; thus, the researcher can decide whether participants share significant and meaningful experience concerning the phenomenon under the investigation.

The required number of participants should depend on when saturation is reached; saturation determines adding more participants to the study do not result in additional perspective or information. For this particular study interviews with 10 participants were conducted and it was found that by the seventh interview little new information was being gained. In addition phenomenological study design need detailed analysis of individuals‟ records which demand long time. However, additional interviews were conducted to ensure that saturation point had indeed been reached. The last interviews confirmed the information gained in previous interviews and thus demonstrated that the information collected had reached a point of saturation. It was at this stage that the researcher decided to complete the interviewing process and continued to analysis.

3.6. Sampling size

In this study a sample size of ten participants with Physical injuries due to road traffic accident were selected based on their sameness. Creswell (1998, p 57) recommended an interview with up to 10 people in phenomenological research is often sufficient. An a priori

sample size of ten people with Physical injuries was selected based on recommendations for qualitative studies of this nature and the expected difficulty and preferred level of depth for this research questions. Three participants were admitted in surgical ward and seven in orthopedics ward.

3.7. Inclusion criteria

Selected admitted road traffic injury victims with Physical injuries in orthopedic and surgical wards were included in this study. Among all admitted victims age of greater than 18 were selected for the study purpose. In addition, the study focused on victims who sustained road traffic accident, came or referred in and admitted to Tikur Anbessa Specialized Hospital for at least one month and above in order to get somewhat stable victims of road traffic accident.

3.8. Methods of data collection

For the purposes of this research, in depth interviews were used. In depth interviews are personal and semi-structured interviews, whose aim is to identify participant‟s emotions, feelings, and opinions regarding a particular research subject. The main advantage of personal interviews is that they involve personal and direct contact between interviewers and interviewees, as well as eliminate non-response rates, but interviewers need to have developed the necessary skills to successfully carry an interview (Creswell,2007).

3.9. Procedures of data collection

The researcher contacted and informed the Medical Director of the institution about the objective and purpose of the study. The study was conducted after the researcher had received approval from Research Committee of Orthopedics and Surgical Ward of Tikur Anbessa Hospital. In order to validate this data collection method the researcher employed the appropriate guiding questions, interview protocol and other data collection materials

(audio tape, field notes). The researcher also undertook pilot interviews with five patients. This improves the semi-structured interview guiding questions and as a result the researcher was able to edit guiding questions which make participants uncomfortable to respond.

Interview time and place were arranged based on participants‟ suggestion in order to get reliable information and make participants comfortable. The interview conducted on face to face base and each interview lasted for 45 to 80 minutes after obtain informed consent from participants. Seven of the participants were interviewed at the orthopedic ward in Black lion hospital and the other three at the surgical ward. The in-depth interview was audio taped on the consent of the participants and appropriate notes also taken.

3.9.1. In-depth Interview

The data collection tools in phenomenological studies consist of in-depth interviews (Creswell, 2007). Thus the researcher used in-depth interview as primary strategy of data collection. The phenomenological researches tend to choose the interview due to their interest to get the depth meaning of phenomenon that is experienced by the particular group.

Semi-structured interviews enable the researcher to gain the support strategies viewpoint of road traffic victims and experiences of accessing support. Semi-structured interviews give participants the freedom to discuss their views from their own perspective within a particular context.

The primary objective of the interview is to ensure the information being obtained from the interview questions corresponded to the research questions. The semi structured questions were translated into Amharic. In order to get depth of answers probes, follow up questions and other interview techniques like probing for clarification or elaboration employed. In general, the in-depth interviews were conducted with ten participants.

3.10. Methods of data analysis

The study used thematic analysis to discover the fundamental themes after analyzing the data that were collected from an in-depth interview, (Creswell, 2014).In qualitative research, the process of data collection and data analysis are interrelated and often go on concurrently in research projects.

Thematic analysis is the process of identifying patterns or themes within qualitative data. Braun & Clarke (2006) suggest that it is the first qualitative method that should be learned as it provides core skills that will be useful for conducting many other kinds of analysis.

For the purpose of this study I used Braun & Clarke‟s (2006) 6-step framework to identify themes and use these themes to address the research equations.

Step 1: Become familiar with the data; in this stage I have read the transcribed audio records for several times which helped me to know and understand the entire body of data deeply. I also make notes to prevent losing of data and confusion.

Step 2: Generate initial codes; at this step I had initial ideas about codes when I finished Step 1. For example family, friend support, sole medical support that kept coming in all interviews and was relevant to my research questions. I carefully analyzed these and developed initial ideas about codes. As I worked through them I produced new codes and sometimes changed existing ones. I did this by hand initially, working through softcopies of the transcripts

Step 3: Search for themes; for this step I examined the codes and some of them clearly fixed together into a theme. For example, I had several codes that related to support that people with Physical injuries are receiving. I organized these into an initial theme called Existing support schemes.

Step 4: Review themes; during this phase I review, modify and develop the preliminary themes that I identified in Step 3. Do they make sense? I gather together all the

data that is appropriate to each theme. I read the data associated with each theme and considered whether the data really did support it. The next step is to think about whether the themes work in the context of the entire data. For example, I felt that the initial theme, Existing support scheme not certainly work as a theme. It overlaps with Medical support during in-hospital and with the first research question. Some of the codes seem related, thus I made a number of changes at this stage.

Step 5: Define Themes; this is the final refinement of the themes and the aim is to identify the core of what each theme is about." What is the theme saying? If there are subthemes, how do they interact and relate to the main theme? How do the themes relate to each other? (Braun & Clarke, 2006). Finally, three major themes, ten sub-themes and five codes were analyzed.

Step 6: writing-up; usually the end-point of research is some kind of report, this stage described under the succeeding chapter.

3.11. Ethical consideration

A fundamental ethical principle of social work research is never to coerce anyone into participating; participation must be voluntarily. The core ethical issues in the profession of social work like respecting the autonomy, the beneficence of the participants and justices are ensured in the whole process of the study. This was strengthened by code of ethics of article 5.2 of NASW by saying "Social workers engaged in research should ensure the anonymity or confidentiality of participants of the data obtained, should inform participants of any limits of confidentiality and the measures that will be taken to ensure confidentiality."

Being guided by this code of ethics, the basic purposes and importance of the study were explained to the participants of the study, and informed verbal consent was obtained from each of them. Researcher protected privacy by not revealing the participant"s identity to any body and except for the sake of the study purpose, and by not disclosing their views using

their name, (Neuman, 2006). The privacy of participants must be maintained; they should be informed that whatever information they provide will be kept in anonymity. In order to protect participants from harm in this study false names were assigned, thus anonymity of information was strongly maintained in the whole process. Ethical clearance was also obtained from Addis Ababa University School of Social Work. Both orthopedics and surgical wards of Tikur Anbessa Hospital also granted me ethical clearance.

CHAPTER FOUR: FINDINGS

In this chapter main research findings obtained from the in-depth interview of road traffic injury victims are presented. This chapter contains two parts; the first part is about the socio-demographic characteristics of the participants. Demographic characteristics included are sex, age, educational status, occupational status, marital status, type of injury and road user group. In the second part the identified major and sub-themes are presented.

4.1. Socio-demographic characteristics of victims of RTI

All study participants were above age eighteen, with physical injuries due to road traffic accident. The length of hospital admission is above one month. Seven were admitted in orthopedics ward and three in surgical ward in Tikur Anbessa hospital. Eight participants had jobs, four of the participants are married, and three participants are single, two are divorced and one is widower. Six of them are male and the rest four are female injury based disability victims. Regarding, their education status except three participants all are above primary level. Based on road user group four participants were pedestrians, one was a driver and five were passengers. Regarding injury types, seven participants are persons with amputation and three persons with paralysis.

Table 1: The Study participants‟ demographics

participant's Code	Educational status	Occupational status	Sex	Age	Marital status	Injury Type	Road user group
1	Grade 11	Selfemployed	M	27	Single	Amputee	Passenger
2	College	unemployed	F	23	Single	Leg paralysis	Pedestrian
3	Grade 10	Farmer	M	55	Divorced	Amputee	Pedestrian
4	Read and write	Factory worker	F	32	Married	Amputee	Passenger
5	Bachelor Degree	Driver	M	38	Married	Amputee	Bajaj driver
6	Bachelor degree	Government worker	M	45	Married	Amputee	Passenger
7	Illiterate	Unemployed	F	38	Divorced	Amputee	Pedestrian
8	Diploma	Office assistant	M	27	Single	Amputee	Passenger
9	Read and write	Daily laborer	M	41	Widower	Leg paralysis	Pedestrian
10	Bachelor Degree	Teacher	M	35	Married	Leg paralysis	Passenger

Source: Researcher‟s own field survey, 2021

4.2. Themes Identified

The study explored the support road traffic injury victims are receiving during hospital admission. The study also discovered hospitalization experience and adaptation mechanisms of victims, accordingly three major and ten sub themes emerged from the study are clarified in the table below.

Table 2: Major and Sub-themes emerged from the study

Major Themes	Sub themes
1. Hospital inpatient support	Support of loved ones
	Partial treatment support
2. Victims‟ experience staying in hospital	The dark and long journey
	Struggling with psychological insecurity
	Disturbing environment
	Being in prison
3. Coping with sudden Physical injuries	Social support
	Learn from other patients with Physical injuries
	Focusing on positive
	Personal life experience

Source: Researcher‟s own analysis of the data obtained from the participants, 2021

4.2.1 Hospital inpatient support

Victims of road traffic injury are receiving social supports and partial treatment support while they are admitted to hospital. Family, friend, other patients, colleagues and neighbors where mentioned by participants as source of support they are incorporated in sub-them “support of loved ones”. In addition participants described the treatment support as “partial treatment support” which is focuses on only in one dimension.

"Support of loved ones"

For victims support from loved ones is a crucial social support that can play a great role during and after hospitalization of victims of road traffic injury. Recovering physical health is related with existing social support. Road traffic injury victims lacking social support structures would be in persistent pain and are less likely to return to normal life. The study participants mentioned social support in terms of financial, emotional and spiritual.

"Family support"

Among the mentioned support sources, the participants stated the importance of family support in the interviews. They felt respected and loved by others, valued and belongingness to a social system of common responsibilities and interactions. The principal group of these victims‟ family includes parents, especially for single people, and spouse for married people. They helped people with Physical injuries in several means such as helping them in doing daily activities, joining them when faced with problems, giving them psychological support, keeping them entertained, especially in dealing with anxiety, giving financial support, elevating their hope, recognizing their lows and ups of life. About family engagement in current situation a participants said

> *My father tried so many things to reassure me about my current condition. He visited and consults traditional healers because he was stressed too and don't know what to do. He was devastated when he heard about my condition; I see it in his eyes that he couldn't handle the situation. My father sensed my pain. Now he is strong enough to handle my situation. His support is very much valuable* (P1)

Being a parent of an injured child creates a tough situation, parents prefer to the injured one than seeing their child stacked on hospital bed. Parents are the second victims for every bad thing happened to their children. A participant said

> *I hug my mother to have relaxed emotionally and I can easily handle problems even when I was embarrassed. My mom has helped me so much. She is with me starting from the accident day. She never cared about anything other than me for the last two months.* (P3)

Emotional wellbeing is the most crucial thing in the process of patients‟ treatment. Emotionally wellness assists victims of road traffic injury to effectively handle current situation, adapt to change and difficult times. A participant said

> *I have tried suicide many times because I couldn‘t manage myself, my brother and his friend helped me a lot during this difficult time via experience sharing, his friend is a solider with disability and he teaches me how to use my left hand and deal with the problem that I am in* (P1)

One of the most fundamental concerns of victims with Physical injuries is financial problems. On the one hand, medical expense is costly. They are unable or have limitations to do income generating activities due to hospitalization and defects caused by amputation. So, they have major problems and worries in this part. Most participants expressed that their families did not complain about financial problems and support them as much as they can. A participant who received financial support, in addition to mental and emotional support from her/his families, said

> *After the injury, my family was worried too much about my condition. My father sold his car; he sold it for half the price and spent it for me. In addition to financial help, they gave me morale. I felt like I can‘t walk. My mother said: _do not worry. We will somehow buy an artificial foot for you* (P2)

However, one of the most vital support features is the noticeable role of spouse highlighted by many participants. Their spouses were the most essential supporter and a close friend in confronting with great odds and difficulties arising from amputation. They always

felt their spouses helped them in dealing with the worries. Their spouses were kind and diligent friends in all aspects and in different complex circumstances. A participant had this to say about this issue:

> *My husband was a conservative person; he never helped me with the house work he strongly believed that house hold works are only for women. He even expects from me when I was sick. Now he has changed his attitude and become a different person, he was shocked when he first heard about my disability since then he took every responsibility and never left for a minute. I believe that everything happens for a reason; the accident changed my husband for a reason. He is sleeping in the hospital floor, never move his eyes from me; he cares for me like a child* (P4)

Another participant stated that his wife never talked about our financial problem to her family. In addition, she has reserved her and her family's confidence and independence. *I have a great wife; she never told her family my problems. She works day and night, after working all day she takes care of me in the hospital. But she never broke her pride and did not accept the second hand and old clothes of others even as gifts. She is the only person helping me in every aspect* (P6)

As noted above, though most victims believed that the family, especially spouse, is the most important supporter in dealing with their daily problems, few of the participants mentioned that their family did not help them in problems and even in some cases they were disregarded by both the family and spouse. However, this situation was not usual in the life of the participants. For example, a participant said

> *One year ago my wife left me and our children. My children can‘t take care of me because they are little. As you can see I have no one by my side from my family to support me. I think that having family and relative support can play a great role in*

helping individuals with a problem like mine. Other admitted patients in this room have at least one person besides them, who can care for them and they are better than me (P3)

A participant faced divorce crisis after being disabled. Her husband was cheating when she admitted in this hospital. She is full satisfied with the support of her brothers and sisters, and considers them as gifts from God. A participant narrated:

The divorce process was very tough in addition to my sudden disability. Instead of apologizing for cheating on me, my x-husband told me that he needs a divorce after knowing that I am no longer able to move. The only people who truly supported me in the divorce and disability problem were my brothers and sisters; I am glad that I am part of this precious family (P7)

"Friends' support"

Intimate friends are another set of support sources. Clearly, life without relationships with others is almost impossible. Close relationship leads to relaxation of the parties, support for each other in case of need and the sense of security and belonging. By telling good memories, assuming amputation simple, by entertaining, advising in everyday life such as job selection, helping and showing empathy and understanding their situation, close friends improve their morale and positive outlook on life: Participants mentioned

"My friends sometimes supported me. For example, they advised me how to do a certain thing or in some cases they comforted me in difficult times." (P2)

"I had a friend, he advised me so much. He was a teacher for me, a great teacher who told me to forget. He taught me to forget some things."(P6)

Despite the emphasis of most participants on favorable support of friends, one of the participants understood that after disability, his friends abandoned him and did not have good feeling for him.

> *"I don't know how I am going to join the community. Because of my disability, I lost my best friends. My best friend told me that he would no longer be with me. I am a topic for the whole village; they predicted that I would never go to work again."* (P1)

"Support from other patients"

Gaining morale from other patients is another set of effective support in dealing with their situation. Other patients mean a group of individuals with lower limb amputation, other amputations or other disability. Participants provided a positive response of this group and felt that the problems of these people are similar to theirs, and they easily understand their problems in everyday life. A participant said:

> *"We are more comfortable with each other. We understand each other more easily. We are looking each other in problems, I feel better when I talk and play with others."*(P8)

Sometimes, similar patients generated the harmony for families, in addition to the individual.

> *One day I was put on the wheelchair to go down to see my mother. At that moment, of God's grace, I saw another victim, passing before me. My mother cried desperately and said _why it happened to you?' Suddenly I touched her hand and said to her _I am not the only one on the wheelchair. Look at this victim. He has lost his both feet.' That act really made us comfortable* (P2)

Peer support can be through their care givers, family and friends of peers can provide support for other victims who don‟t have family to take care of them. A participant narrated:

*I have no one to take care of me; I was alone when I was admitted to this hospital, the nurse told me that ambulance brought me here. I lost my phone during the accident. I couldn‘t memorize any of my families‘ cellphone number. I don‘t even remember the place where I come from, I am desperate and lonely I don‘t know how I am going to find my family. Since the accident other patients‘ families are caring for me (*P4)

“Neighbours support”

After road traffic injury and being admitted to hospital victims‟ are forced to leave everything suddenly, they are unable to take care of their children, don‟t have the chance to return to home to lead their life before the accident. During times like this neighbors are supporters, according to the participants:

When I was brought to this hospital I left my two children behind, I have talked to them after a week through my neighbor. Since the accident they are being taken care of by my neighbors. My neighbor is doing everything for my children (P3)

Neighbor is a potential source of support for people in difficult situation. Neighbor can bring hope and prevent unfortunate situation. Some people are very lucky to have greater neighbors that they interact with every day, because good neighbor can be helpful for emergency child care.

My neighbor is the one who is taking care of me beginning from the accident day. She was the only person who arrived at the hospital after the nurses gave her a call (P8)

Good neighbor can be especially helpful when sudden problem happened, they can keep an eye on property. They can be a great source of recovery.

> *My family is here with me because of our neighbors are taking on the household activities including the business that I was running* (P1)

Even though there are neighbors who are supporting victims, some participants mentioned that they have fears regarding how to interact with them after Physical injuries . Even some participants are thinking of changing residential area due to fear of discrimination.

"Support of Colleague"

Support from colleague was mentioned as valuable to victims. Participants articulated that their colleagues realize their state and manage to provide their financial and emotional support. Victims benefited from the collaborative colleagues. A participant says about the advices and guidance of his colleagues on the importance and encouragement to marry his girlfriend:

> *My colleagues advised me to marry due to my situation. They said that it must no longer be delayed; you must marry and have a child so that you can solve part of your problems and also your child and wife can provide a special help for you tomorrow* (P8)

However, one participant complained about the lack of understanding and attention of his boss. He stated that his organization did not follow the rules and justice in respecting his rights and this is the reason of his stress.

> *Unluckily, at this moment there is no practical support from my boss. Actually, he is not an understanding person; my friends told me that he will soon replace me due to my disability. He never thinks that this could happen to him too* (P6)

“Partial treatment support”

Health care providers support victims of RTI based on their history of diagnosis. Treatment support can be delivered to road traffic victims during pre-hospital, hospitalization and posthospitalization. In this study treatment support for victims with Physical injuries during hospitalization was assessed and interviewed participants mentioned that they are getting sole routine medical support, repetitive medical support, delayed(during pre-hospitalization and hospitalization) and uninformed medical decision(before and after) and medical material support.

Victims of road traffic injury are receiving a single medical support which focuses on treating a single injury. Participant sadly narrated:

> *There is no other special service designed to support patient with disability. Even routine medical services are expensive and difficult to get, even if I am receiving routine services daily, according to my understanding they are not enough and accessible to all car accident victims. Moreover, there is no any special consideration provided for me as an immigrant, I expected many services from this facility but sadly they couldn‘t provide it for me. They are providing only medical support* (P1)

Victims of road traffic injury are receiving support only for physical injury, health care providers help victims with medical support which is visible: Participant described her feeling as follows:

> *When I regained consciousness I knew that I am disabled, no health care provider explained why they removed my leg, and they just talked to me as if nothing happened. They only care about the fact that I am breathing and alive. I have got medical support only but they never care about the internal problem that I am feeling* (P4)

During their admission victims receive repetitive type of treatment, not the type of treatment they expect to receive in the hospital. Providing one aspect of the medical service is not addressing patients need and it can‟t brining positive outcomes; it can even delay victims‟ medical improvement: A participant stated:

> *During my admission the nurses assessed my vital sign and administered a prescribed medication by the doctor who diagnosed me. I have witnessed that all service providers are busy in managing physical problems with injections and pills which is uninteresting. I am very much tired of medications* (P6)

Other participant further explained…

> *The nurses are providing me with wound care and many other medications every morning for the past two months without interruption. However, none of them even tried to talk to me about my internal stress. I am not well inside and exhausted with the hospital environment, once they gave me the routine care they live the room immediately* (P8)

Trauma hospitals are expected to deliver services instantly for victims of road traffic injury, in order to save their life and to make future treatment outcome positive. Health care providers must have the ability to make patients priority in any condition. Delayed medical decisions can collapse the life of survivors of road traffic injury for the rest of their life. Participant connoted that:

> *I have got service after three days due to corona; all health care providers were busy with treating patients with corona disease. The student nurses saved me by stopping the bleeding, after three days the doctors told me that my leg should be removed due to gangrene. I feel that if the treatment was immediate my leg might have been saved from amputation* (P5)

Doctors and nurses are expected to discuss with victims the medical decision about their health. Victims have the right to know each and everything about the decision made for each medical intervention after or before each procedure. If victims are not able to decide due to many reasons i.e. unconsciousness, family can decide for them in order to save their life. But three participants explained that they are exposed to uninformed medical decision which makes their life hell: Participant said

> *I knew that my left leg had been removed after I regained consciousness; I couldn't control myself and lost consciousness again. When I again regained consciousness I knew that I am disabled, no health care provider explained why they removed my leg. I still don‘t know the risk which would happen if they didn‘t cut it off and I might have decided to be rather paralyzed than being amputee* (P4)

Participant added...

> *I have lost my two legs because of the fast and un-informative decision that the doctors made. I would have saved my one leg, if they informed my families prior to the procedure and thought again. I always think that things might have been better if they had waited until I regain consciousness or consulted my family* (P6)

> *I am not still clear with the advantage of removing my left leg and hand, the nurses always replied saying to save your life because this is the only explanation they have, but I prefer death to this life in this night mare. I am sure that my decision would have been to end my life if they had discussed it with me. I understand it as if they denied my right to informed decision about the thing going on my own body which is killing me every day* (P7)

A medical support which only focuses on provision of materials like wheelchair and crunch could not heal the victims‟ problems. Providing a crunch without psychological

support, counseling on how to use it for a person exposed to sudden disability might have a negative impact than the positive one.

A participant sadly said…

> *I was shocked when the nurse gave me a wheelchair for the first time without saying a word. I was expecting that she would teach me the techniques to use it because it is not simple like it seems to use wheelchair for the first time. After she left the room I cried for an hour and blamed myself for being alive. I never forget that moment which I feel completely lost everything and breaks my heart* (P9)

4.2.2. Victims' experience staying in hospital

Admitting road traffic victims to inpatient care is a complex process that requires careful harmonization among physicians, nurses, registration staff, and others within the organization. Ineffective admission processes can lead to long wait times for patients, staff frustration, and a negative patient experience, as well as communication problems that can impact patient safety and quality. Participants expressed their experience of hospital admission as "the dark and long journey", "struggling with psychological insecurity.", "Disturbing environment".

"The dark and long journey"

Most of the victims hated and criticized being admitted to hospital because they are facing unpleasant events regarding other patients and health care providers: participants said

> *Since the first day I was admitted to this hospital, I have been facing various bad events like observing other patients, those who are in constant pain which hearts me a lot since I can't do anything because I am one of them* (P10)
>
> *I am tired of waiting for better treatment outcomes; I need something which can save me from this nightmare. I am in constant pain and calling nurses many times to help*

me, calling them make me observe bored providers which are additional pain. There are nurses whose lack of sympathy and suddenness of manner made me wonder why they are nurses at all—perhaps to them it is just a job (P5)

"Struggling with psychological insecurity"

During hospital admission victims mentioned that they are severely exposed to psychological insecurity i.e. flashbacks, insomnia, Fear of the future, and Guilty feeling: participants explained

Ever since I regained consciousness I am memorizing every scene of the accident, especially the moment I saw individuals smashed and died by the truck is unforgettable moment (P7)

I couldn't sleep due to the pain I am feeling, even the medications side effect won't let me rest. Even if I try to sleep it is difficult due the noise from other patients. I don't know why God didn't visit me with his mercy; sometimes I feel that I am dying (P4)

All my plans have disappeared with my health, now I couldn't plan for the future because; I don't know what will happen after a minute. I am in the hands of God; one day I might not see the morning (P3)

Road traffic accident victims also described lack of confidentiality and observing own disability impact on family: Participants replied

The doctors and nurses never cared about what other patients say after knowing my health status. Health care providers always disclose my result concerning my health in the presence of other patients, which made me to think of lack of confidentiality. I always care about what others think about me. I prefer my medical information to be confidential (P6)

I feel that my families are the first victims due to my disability in many aspects; I was the one who had been providing them with financial support. Now the reverse is happening. They are stressed in many ways due to my problem. I would rather die than seeing them suffer because of me (P8)

"Disturbing environment"

Victims are expecting hospital rooms to be a peaceful and enjoyable environment, but this is not happening due to different reasons: respondents clarified.

"Since the hospital admitted a lot of patients in a single room, I couldn't sleep day or night due to lots of visitors and many other problems."(P2)

"The hospital administrator never thinks of installing TV in the room, it is very essential not only for entertainment it can also help me to forget our problems, it could help me to avoid over thinking about my current situation" (P7)

"The food they serve is horrible, but glad to get when hungry even if it's repetitive" (P5)

"Being in prison"

Victims consider their situation the same like being in jail, because their movement is restricted and they are in control of other persons. They can't do whatever they want to do. They even need assistance to keep their personal hygiene, Participants replied:

"*My brother is the one who cleans my private part after I pee, which makes me wish for death every minute. I couldn't even kill myself. Because now I am using others hand*."

"Now I am the living dead, I couldn't move my body. God is punishing me for my sin. I am always jealous of the dead people during the accident" (P1)

Moreover, during their admission they perceived disability as “rebirth”, “and “cause for being dependent.” Participant explained:

> *“This event is like rebirth to me because I have to learn how to eat, clean myself again and even I have to learn how to interact with others, I am like a child who starts to walk*” (P1)
>
> *Due to my disability I end up surrendering, which I never imagined before, now I am in control of other individuals. I am sure that one day they will be tired of caring for me, because they have to lead their own life* (P10)

In contrary, one victim explained things might be different if his injury were on the opposite side, because now things are much more difficult than nobody could imagine: Participant said

> *I feel that it would be better if opposite sides were injured because now I have to use my left hand and leg only, which is very difficult for me in the future. Since it is a new experience for me especially for my left hand, things are going to be worse because I was right handed before the accident; my right hand was very active in carrying out activities. From now on I have to teach myself to use my left hand which is going to be very difficult* (P1)

4.2.3. Coping with sudden Physical injuries

Victims‟ strength can determine the seriousness and grade of injury. Several victims recognize the seriousness of their traumatic events as simple while others recognize them as an end of life. The ability of coping with traumatic event differs from person to person. Generally, victims with multiple injuries have less strengths and coping mechanisms than those who were exposed to a specific injury. Adoption time and coping strategies can be determine by the type of the trauma and which part of the body is injured. Victims can use single or different mechanisms. During the interview with victims‟, social support, peers,

focusing on positive and personal life experience are mentioned as coping mechanisms practiced by participants.

"Social support"

Their spouse, parents understanding and devotion were the main tools used by the participants to overcome the problems and inability caused by amputation. Their spouses often increased their confidence; comfort, encouragement and spiritual wellbeing in these areas: Participants said

> *My father is helping me through religious fathers and prayers. I have strong faith in God that He will provide me with essential things throughout my life. In general my family and God helped me a lot to cope with my situation and I am grateful* (P1) *I pray a lot because I hope that Allah is with me and help me throughout this difficult time I have faith in Him* (P5)
>
> *I have a family who love and care for me even with my current condition. Especially my wife and children are the reason why I struggle to live, and I know I will be a burden for them afterwards but things might change one day* (P6)

"Learn from other patients with Physical injuries"

Observing similar and greater defects in other victims, individuals become an effective aid in adaptation with the current state. In addition, victims are using playing and talking with others in order to divert themselves from thinking about the current situation.

> *The other thing is that I have learned a lesson from others, I have seen patients who have lost both their hand and leg in this room due to car accident and hope for the future, and thus they taught me many things* (P5)

I saw many dead bodies during the accident, many young lives cut short; I am the only survivor from the accident, this gave me courage to continue my life, at least I can breathe and talk (P6)

I always like to talk with other patients because it will help me to forget the horrible situation and I gained a lot of information from them regarding different things (P1)

"Focusing on positive"

Acknowledging the love and caring devotion of family, parents, peers, colleagues and friends victims usually strive to cope with their problem and live with their loved ones. Focusing on being under treatment can also enable them to hope for better outcomes which helps them to move forward: Participant replied,

Even if I am a 24/7 job for them my family is the people who have helping me going all through this hard time. They have been supportive and have been with me, physically, emotionally and in every possible way. I wish I had not become such a big problem for them (P1)

"Now I am dreaming of living my normal life, since I am in the hospital the treatment outcome will be good even if the health care providers are treating my physical problem" (P3)

"Personal life experience"

Victims‟ personal life experience can play a great role in handling the current situation. Participants believe sometimes it is good to see bad things in their own life and others‟ because it provides a lesson. Some victims believe that sometimes strong people are made from challenge: Participants said

My personal strength helped me to go through this difficult time. Like I told you earlier I am a strong farmer with lots of work experience, I have passed so many

challenges and took a lesson from my past. Life teach me so many things I have passed huge problems but not like this one, anyways I believe that God created me with strength to tackle all problems and my creation contributed a lot for my resistance to this problem too (P3)

I was experienced other injury due to the chronic disease that I am diagnosed with, thus even if I am going through a hard time I am handling it. My previous health related experience is helping me to manage this one (P8)

CHAPTER FIVE: DISCUSSION

In this section, the findings of the study were discussed in relation to available literatures, research question and theories. The discussion is based on the emerged three main themes.

5.1. Hospital inpatient support

Support is the most significant component for victims of road traffic injury to become healthy. Support can be provided during pre-hospital, hospital and post-hospital based on RTI victim's needs. Hence, without support victims‟ probability of attainment reduced in returning to the usual life. The results showed that understanding support by sources, victims have two dimensions i.e. "Support of loved ones" and "partial treatment support".

The participants articulated that they received the best support from the family. The helpful care and support from family bring hope and encouragement to the victims and make them feel cherished, loved by others and hope for the future. The finding of this study is consistent with Pistulka (2002) study on stress, social support and depression, and found that stress and social support have a significant relationship with depression they also argued that the social support may function a protective shield between stress and depression. The importance of family support in the conservation and advancement of hope in victims with physical injuries is valuable. Since people with amputation spend much of their time with their families, family support is crucial. In addition, victims considered friends, peers, neighbors and colleagues support as the key member in supporting them. In contrary, one participant mentioned that her spouse could not tolerate difficulties and separated, the participant experienced a very hard mental trauma due to multiple stress intolerance.

This study finding related with Faramarzi (2011) who argued that spouse of person with disability can primarily affect the psychological state level of his/her spouse. Due to the

issues caused by the incapacity of their spouses, they'll experience different stresses in order that a number of them may choose divorce.

The participants also mentioned the supportive role of friends during their admission in hospital. The supportive role and behavior of their friends boosted the sense that they are not alone in facing with problems and they can overcome the problems with the support of friends. The finding of this study is related with the findings of Rambod (2010) which demonstrated that most patients expressed that there's someone who loves them and worries about them, and this increased their assurance and skill to cope with the illness. Similarly allied with Fyrand (2002) whose study finding suggests that people with more friends have more social support and this social support promotes consistency behaviors in them.

Despite the stress of the bulk of participants on good support of friends, just one of them believed that after amputation, his friends abandoned him. In confirmation to this case, Lew (2007) finds out that in the result of long duration of treatment and lots of problems of those patients, friends‟ attention to those people reduces over time. Subsequent to the support by family and friends, the participants seemed to profit from the support of the peers.

Individuals during a particular social network, especially within the peer groups such as groups consisted of patients with similar disease can help one another find an answer to the problem, authenticating, navigating to the knowledge, creating positive emotions and luxury. Communication with others may be a central part in social support because social support is concentrated on understanding and recognizing each other's needs. The finding of this study is similar with Hildingh & Fridlund (2004) who studied the impact of social support on the matched patients with similar clinical conditions and re-admission to the hospital. The results revealed that patients who participate in support programs of matched patients have more physical activity. They concluded that matched groups exchange

experiences with each other and a collective spirit governs the group so that they help each other. In addition, social processes such as social comparison, social learning and social exchange formed in the groups accelerate the patients‟ recovery.

The colleagues and neighbors were the last support sources, which covers the ground to strengthen back to usual life. This finding of this study is similar with the finding of Dolan et al (2008) which elucidated that the lack of supportive factors in the workplace reduces the health level and quality of life of employees. The lack of social support in the workplace separates employees from each other and eventually ruptures the bond between them. In such a situation, conflict and disruption make the staff see their efforts inconclusive and become dissatisfied with their jobs and the governing relations in the workplace due to the lack of supportive feedback for their professional efforts. Subsequently, a kind of disappointment appears in personnel, threatening the survival, quality of life and organizational stability. And the finding of this study is also consistent with that of Prang et al (2015) which demonstrated that injured victims with neighbors, family, and friend spouse support had a positive impact on physical health, pain and return to optimal functioning such as returning to normal life after road traffic injury.

Victims also mentioned that they received partial treatment support during their hospital admission. As they mentioned even if they are getting sole routine Partial treatment support which only addresses a single problem, it is a mean for their wellness. This study finding is similar with that of WHO (2009) and Persson (2013) showed that traumatic survivors struggled a lot to return to normal life but seriously need to receive support and security from the health worker team, especially nurses. As mentioned in the finding section participants described the inpatient treatment service as sole routine medical support, repetitive medical support, delayed (during pre-hospitalization and hospitalization) and uninformed medical decision (before and after any procedure) and medical material support.

WHO (2015) also indicated High-quality treatment and intervention for rehabilitation in the period of hospitalization immediately following an injury are utmost importance, in order to prevent life threatening complications related to immobilization.

5.2. Victims' experience of staying in hospital

The findings of this study have provided valuable qualitative information, which will help to advance medical and support in relation to patients need thereby enhancing patient experience on a hospital ward. This study has proven that patients felt that they were not getting staff assistance regarding medical service and they found the hospital condition a disturbing environment. Participants were disturbed by noise from other patient and staff at night. Some patients felt they did not get enough information about the medical decision. This study finding is consistent with that of Sagi et al (2016) which indicates patients were being disturbed by staff and other patients: some felt bothered or threatened by other patients. Patients who have impaired cognitive function and other patients may produce more noise for several reasons. Nursing staff continue to work through the night, which can be disturbing to some patients.

According to the finding, hospitalized victims expressed their experience of staying in hospital rooms as "the dark and long journey", "struggling with psychological insecurity.", "Disturbing environment". Majority of the victims expressed their hospital admission as negative experience, because they underwent painful moments. Halvorsrud et al (2016) exploring the individual patient journey can lead healthcare organizations to improve patient experience by focusing on the patient perspective, rather than the provider perspective.

5.3. Coping with sudden Physical injuries

In this study victims are using social support, peers, focusing on positive and personal life experience as methods to adapt with their current situation being physically disabled. Social support mentioned as the main mechanism of coping with sudden Physical injuries . Parents

and spouse support is the most useful mechanism among social support. Support from religion and peers with the same situation can be coping mechanisms. Similarly, Persson (2008) described that victims used peer-to-peer support, family support, religious justification for the accident, and media based information for relaxing themselves after RTA. The considerable point among the participants was that their personal characteristics and use of adaptation skills were effective in accepting the situation after being injured. The results of this study indicated that returning to normal life was a difficult and long-term process for victims of road traffic injury. Victims require multifaceted support to return to normal life included strong treatment, nursing, and social support and participating in selfcare activities. Similarly Anteneh (2015) mentioned the requirements for the victims to return to normal life included access to training and support (strong treatment, nursing, and social support) and participating in self-care activities.

This stud contains some limitations i.e. only interview as data collection but it is more beneficial to mix other data collection methods in order to make data richer more and quality. The other limitation is, language deficiency impacted the data collection which results losing of potential participants, thus being multilingual can be beneficial in order to avoid dropping of participants.

CHAPTER SIX: CONCLUSIONS AND IMPLICATIONS

6.1. Conclusions

Assumed the high number of societal, physical and psychological complications in victims of road traffic injury, assessing and strengthening support sources can be effective in their adaptation with the issue and advancement of their health.

During hospital admission victims are receiving treatment from doctors and nurses and social support of family members, peers, friends, neighbors and colleagues. In addition even if victims perceived Partial treatment support as negative, they believed that they should be treated with health care professionals in order to be healthy. They described the partial treatment support as sole, repetitive medical support which only focuses on physical treatment and single intervention. Delayed partial treatment support during prehospitalization and hospitalization is one of the supports that they are getting. Uninformed medical decision before and after procedures and material support were mentioned and victims think that partial treatment supports are not adequate and quality.

Regarding experience of hospital stay, many of the victims perceived their hospitalization as a place where their anxiety develops. Because of different reasons like bad relationship with health care providers, disturbing environment and due to many other problems admitted victims hated to be hospitalized. In contrary, there are victims who believed that being in hospital is a safe place for them. Hospitals can considerably advance the quality of the service provided by exploring and understanding the individual patient journey.

Social support i.e. religious, family and friends are mentioned by victims as their way of coping with the issue. Victims strongly connoted that social support is vital in coping process because it can help in various ways. Adaptation with the problem occurred in the circumstance of social relations with others.

6.2. Social Work Implications

The main mission of social work is to improve human wellbeing and help to meet the basic human needs of all people, with specific attention to the needs and empowerment of people who are vulnerable, oppressed and living in poverty. A historic and defining feature of social work is the professional‟s focus on individual well-being in a social context and the wellbeing of society. Fundamental to social work is attention to the environmental forces that create, contribute to, and address problems in living, (NASW, 2000).

Support for people with physical injuries comprises multifaceted intervention including social workers involvement. Providing support service for people with Physical injuries involves them with health professionals, psychologists, legal experts and other agents. The impacts of physical injuries due to road traffic injury encompass researchers and various institutions for comprehensive interventions in order to improve the general wellbeing of the victims. In general, the study will have social work practice, future research and policy implications.

6.2.1. Social work practice implications

Road traffic injury is a disturbing experience and it causes physical injuries. The negative impact of physical injuries on individual, family and social aspects is vast. The traumatic experience of road injury requires various interventions. The possible intervention areas for social workers are counseling, education and support. As indicated in the findings of this research people with physical injuries are getting social and partial treatment support only, even if they are in need of support for problems related with psychological aspect. Education will include giving training and educating victims and families‟ productive coping skills to adapt the negative effects of road traffic injury. Similarly, the way to use existing resources and how to deal with health care professionals will be an anticipated involvement area for social work education. Social workers can also advocate for policy

developments and implementations that will enhance comprehensive support for people with physical injuries due to road traffic accident. Involving former casualties and their families to spread awareness messages and educate the community.

6.2.2. Future research implications

Physical injuries due to road traffic injury can affect the victim‟s psychological, physical and social life. I conducted this research on support for people with Physical injuries due to road traffic accident on seven persons with an amputation and three with paralysis participants. Road traffic injury is also a cause of brain injury that leads to mental illness. Traumatic brain injury caused by road traffic injury can be research topic to study victims with brain injury. Road traffic has a vast impact on family care givers, thus the psychological and social impact of road traffic injury on families of victims of road traffic injury can be potential area for future researches on the issue. Overall, using the person in environment conceptualization of disability in research will help to identify the vigorous nature of disability due to road traffic injury, which is attributed to interaction between the personal, interpersonal, social and physical environments. Further research can explore practical, methodological and ethical challenges more deeply in capturing the whole patient journey experience by using multiple methods and integrated tools. Given the significance of social support in coping with physical injuries, future studies are recommended to identify other support schemes or sources.

6.2.3. Policy implications

As can be implied from the research findings, victims of road traffic injury face different problems during their hospital treatment period. Problems related with medical decisions, confidentiality and over all qualities of treatment support can be a factor for patients to have positive treatment outcome. Thus, the finding of this study can be pinpoint to formulating polices on employment of social workers among others and procedures to implement high quality, comprehensive and timely treatment.

Referencess

Adisu, A., Girma, S & Biruk, L. (2019). Common types and pattern of bone fractures among road traffic injury victims seen in Addis Ababa public Hospitals.

Aklilu, E (2019). The burden of road traffic injury among trauma patients in Ethiopia: *A systematic review and Meta – analysis.*

Alister, C & Simon, B. (2011). Licensed to skill England and Wales: *Institution of advanced motorists limited.*

Announcement CDC (2016). World day of remembrance for road traffic victims.

Baily (1987), Methods of Social Research

Bahiru, B., Biruk, L, Maxime J, Coles, M. (2012). Treatment of adult femoral shaft fractures using the Perkins traction at Addis Ababa tikur anbessa university hospital: *The Ethiopian Experience*

Benjamin, C & William, M. (1999). Doing qualitative research.

Berhanu, G. (2000): Effects of road and traffic factors on road safety in Ethiopia.

Bless, C & Higson-Smith, C. (1995). Fundamentals of social research methods: *An African perspective.*

Bogdan &Taylor, 1975. *Qualitative research methods*: A review of major stages, data analysis techniques.

Boyatzis, R. (1998). Transforming qualitative information: *Thematic analysis and code development.*

Braun, V. & Clarke, V. (2006). *Using thematic analysis in psychology*. Qualitative Research in Psychology, 3, 77-101.

Chalachew ,T., Girma,S., Gemechs, R., Biruk, L. (2020) Clinical profile and patterns of extremity fractures In orthopedics department In Tikur Anbessa Specialized Hospital

Churchill, G & Iacobucci, D (2005). Research design, exploratory research, and qualitative data.

Murray, C, Vos, T, Lozano, M. Naghavi, A.D Flaxman, C. Michaud, et al. (2010) Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1991-2010: a systematic analysis for the global burden of disease study.

Creswell, J. (1998). Qualitative inquiry and research design: Choosing among five approaches.

Creswell, J. (2007). Qualitative inquiry and research design: Choosing among five approaches.

Daniel, A., Tekle, Y., Bruk,L. (2009) Radiological and Clinical Details of Major Adult Limb Fractures in a Teaching Hospital, AAU, Ethiopia.

Daniel, A., Tekle,Y., Biruk.,L. (2010) Adult limb fractures in Tikur Anbessa Hospital caused by road traffic accident: *Half year plain radiographic pattern*

Daniel, G. (2010). The Psychosocial Effect of Road Traffic Injury in Addis Ababa

David (2005). An In-depth Study of Work related Road traffic Accident

Dawit, O. (2016). Road Traffic Accident and safety Evaluation Case of Addis Ababa Bole Sub City

De Vos, A.S. 1998. Conceptualization and Operationalization

Debela, D. (2016). Traffic Accident Causes and Countermeasure of Addis Ababa Adama Expressway.

Dell Orto, E.A., & Power, W. P. (2007). *The psychological and social impact of illness and disability (*5th ed.*).* New York: Springe Publishing Company.

Dobranskyte-Niskota, Perujo, A., & Pregl M. (2007) Indicator to Assess Sustainability of Transport Activities

Dowining,A.J. (1991) Pedestrians safety in developing countries. International

Conference on Traffic Safety, New Delhi. Mcmillan Indian Limited.

Dolan SL, García S, Cabezas C, Tzafrir SS. Predictors of "quality of work" and "poor health" among primary health-care personnel in Catalonia: Evidence based on cross-sectional, retrospective and longitudinal design. *Int J Health Care Qual Assur.* 2008

Finkelstein, E., Corso, P., Miller,T. (2006). The incidence and economic burden of injuries in the United States

Elvic, R, et al. (2005). The Handbook of Road Safety Measures

Eshbaugh, et al. (2012), putting the brakes on road traffic fatalities in Africa

Factsheet (2013). Road Safety in the WHO Africa region.

Faramarzi, S.(2011) Effectiveness of cognitive-behavioral life skills and mental health of women with disable husband. Q J Soc Welf. 2011;11:217–34.

Fyrand, L, Moum T, Finset A, Glennås A. The impact of disability and disease duration on social support of women with rheumatoid arthritis. J Behav Med. 2002

Getachew, S et al. The Burden of Road traffic accident in an Emergency Department in Addis Ababa, Ethiopia

Gibson (2006), Thematic Analysis

Gray, D.E (2004). Doing Research in the real world

Guillemin (2009) Rapport and respect: Negotiation ethical relation between researcher and participants.

Hailemichael, F. (2015). Magnitude and outcomes of road traffic accidents at Hospital in Wolaita Zone, SNNPR, Ethiopia.

Halvorsrud R, Kvale K, Følstad A. Improving service quality through customer journey analysis. JSTP.2016; 26:840–67.

Khare (2012) Khare,N. Gupta.,S, A. Varshney, A. V. Athavale: Epidemological study of Road Traffic accident cases attending tertiary care hospital, in Bhopal Madhya Pradesh.

Hildingh.,C, Fridlund B. A 3-year follow-up of participation in peer support groups after a cardiac event. *Eur J Cardiovasc Nurs.* 2004;

Kinnear, T.C & Taylor, J.R. (1996). Chapter 5: Research Design and Data Sources.

Komba (2006), Risk Factors and Road Traffic Accident in Tanzania: A case Study of Kibaha District, pp 10.

Kopits & Cropper (2005), Traffic fatalities and economic growth, Accident Analysis and Prevention

Kopits, A.E. (2004). *Traffic Fatalities and Economic Growth*. PhD Thesis. University of Maryland. Retrieved November 12, 2009, from www.lib.umd.edu/drum/bitstream/1903/1982/1/umi-umd-1934.pdf

Krug EG, Sharona GK, Lozano R (2000) The Global Burden of injuries American Journal of Public Health

Lisa, K. S., B. David, et al. (2005). Evaluation of Traffic Crash Fatality Causes and Effect. Florida State, Florida A and M University, Florida State University.

Lambisso W., Permanent Civilian Musculoskeletal disability following injury-17 year trends. ECASJ, Vol. 11, No. 1, 2006, pp. 41-48.

Lew SQ, Patel SS. Psychosocial and quality of life issues in women with end-stage renal disease. *Adv Chronic Kidney Dis.* 2007

Makuu, M. (2010). Causes of Road Traffic Accidents induce Physical injuries and its socio-economic Consequence to victims and their families in Dar es Salaam region of Tanzania.

Marshall, C., & Rossman, G.B. (1995). Designing qualitative research. Thousand Oaks,

Calif: Sage Publication.

Mekonnen, T. (2007). Empirical Analysis on Traffic Accident involving human injuries: the case of Addis Ababa. MSc, Addis Ababa University

Miles, M. B. (1994). Qualitative data analysis

Miller (2000). Cost-Outcome Analysis in Injury Prevention and Control: Eighty-Four Recent Estimates for the United States, Medical Care.

Mohammed. (2011). Injury characteristic and outcome of road traffic accident among victims at Adult Emergency Department of Tikur Anbessa specialized hospital, Addis Ababa, Ethiopia: a prospective hospital based study.

Moustakas, C. E. (1994). Phenomenological research methods

Muhlrad N, Lassare S (2005) Systems approaches to injury control. New Delhi: Macmillan Indian Ltd.

Mutooro, Mutakooha, E & Kyamanywa, P. (2010): A comparison of Kampala trauma score II with the new injury severity score in Mbarara University Teaching hospital in Uganda.

Muvuringi (2012): P.M. Muvuringi Road Traffic Accidents in Zimbabwe, Influencing Factors Impacted and Strategies.

Naci, H., D. Chislom, et al (2008). Distribution of Road Traffic Deaths by Road User group: A global comparison.

National Road Safety Coordination Office. (2006). Overview of the Road Safety Activities

Negesa, L. (2017) Characteristics of Road Traffic on the Road between Hara and Dire Dawa, Eastern Ethiopia

Neuman, (2006), Social research methods

Neuman, W (2006). Social Research Methods: Qualitative and Quantitative Approaches.

Ogendi &Ayisi (2012): Causes of injuries resulting in a visit to the emergency department of a Provincial General Hospital. Nyanza, western Kenya, PMC.

Peden, M., Scurfield R., Sleet D., Mohan D., Hyder, A., Jarawan E, et al. World report on road traffic injury prevention. World Health Organization Geneva (2004)

Peden., M, Scurfield, R, Sleet D, Mohan D, Hyder AA, Jarawan E, et al. World report on road traffic injury prevention. World Health Organization Geneva (2016)

Pistulka, G, (2002). Acculturation Stress, Social Support and Depression among the Korean American Immigrant Elderly in Maryland. *The 130th Annual Meeting of APHA*. 2002

Rambod, M, Rafii, F. Perceived social support and quality of life in Iranian hemodialysis patients. *J Nurs Scholarsh.* 2010;42:242–9

Sagi, S & Chen, Cong & Htun, Kyaw & Puvanendrampillai, Kalyani & Ratnayake, Medhavi & Ngwira, Joseph & Rajkanna, Jeyanthy & Oyibo, Samson. (2016). Patient Experience during Hospital Stay.

Segni, G. (2007). Causes of Road Traffic Accidents and Possible Counter Measures on Addis Ababa-Shashemene Roads.

Shah A, Jarwani B. (2014) Study of patients of road traffic accidents arriving in emergency department (ED) of V.S hospital at Ahmadabad city.

Shanthi (2003). Risk of disability due to car crash: a review of the literature and methodological issues.

Solagberu (2006) B.A. Solagberu, C.K. Ofoegbu, A.A. Nasir, O.K. Ogundipe, A.O. Adekanye, L.O. Abdur-Rahman: Motorcycle injuries in a developing country and the vulnerability of riders, passengers, and pedestrians.

Temesgen, B. (2019) Road Traffic Accident Related Fatalities in Addis Ababa City, Addis Ababa, Ethiopia: *An Analysis of Police Report.*

Tequam, D., Zebiba, S., Daniel, Z., Abenezer, T., Negussie, D., Getachew,A., Abebe M.,

Yocabel G., Tsegazeab, L. (2016). Computerized Tomographic Patterns and Correlation between Imaging Findings and Mechanism of Injury in Traumatic Head Injury patient, at Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia

Tintinalli (2004): Emergency Medicine a comprehensive study guide.

Tiruneh et al. (2014) Incidence of Traffic Injury and Associated Factors among Patients Visiting the Emergency Department of Tikur Anbessa Specialized Teaching Hospital, Addis Ababa, Ethiopia.

Toroyan, (2009). Global status report on road safety

Tsegazeab, L et al (2019). Profile of Head Injuries: *Pre-hospital Care, Diagnosis, and Severity in an Ethiopia Tertiary Hospital*

UN (2011). The Africa Report

Ung, C. H., H.E (2007). *Road Safety in Cambodia H. E. U. C* Hour Phnom Penh, Ministry of Public Works and transport

UN (2011).Economic Commission for Africa, *Case Study: road safety in Ethiopia*, Volume 19.

WHO (2004). The world report on road traffic injury prevention

WHO (2009).*Status report on road safety,* Available from www.who.org

WHO (2010).*Status report on road safety,* Available from www.who.org

WHO (2013).*Post-crash response*: Supporting those affected by road traffic crashes.

WHO (2015).*Status report on road safety*. Available from www.who.org

WHO (2018).*Status report on road safety*. Available from www.who.org

Yishak. A & Biruk L. (2009). Microbial susceptibility of bacteria isolated from open fracture wounds presenting to the ER of black-lion hospital, Addis Ababa University, Ethiopia.

Yodit, M. (2018). Treatment Outcome and Associated Factors of Road Traffic Accident at Emergency Department of Trauma Treatment Center of Addis Ababa

Yomi, K. (2018). *Death Rates from Traffic Accidents in Africa Region.* Retrieved from https://www.weforum.org/agenda/2019/02/death-rates-from-traffic-accidents-arehigher-in-africa-than-anywhere-else/

Appendices

Appendix A: Consent Form

(*Assessing Support for permanent disability caused by road traffic injury)*

My name is Betelihem Getachew .I am a post graduate student at Addis Ababa University, School of Social Work. Currently, I am doing a qualitative study on experiences and coping strategies of people with physical injuries due to road traffic accident. The study has a purpose to assess the experiences and coping strategies of people with physical injuries due to road traffic accident

Consent to take part in research

I…… voluntarily agree to participate in this research study.

I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.

I understand that I will not benefit directly from participating in this research.

I agree to my interview being audio-recorded and will lasts for an estimated length of one hour.

I understand that all information I provide for this study will be treated confidentially.

I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about.

I understand that signed consent forms and original audio recordings will be retained until the exam board confirms the results of the thesis.

I understand that I am free to contact the researcher to seek further clarification and information.

Names of the researcher Betelihem Getachew,

Phone No - 0911-85-22-99.

Signature of research participant

---------- Date ----------

Signature of researcher

---------- Date----------

I believe the participant is giving informed consent to participate in this study

Thank you for your participation!!!

Appendix B: In-depth interview Checklist

I. Demographic characteristics

Age _____

Sex _____

Marital Status_____

Number of children_____

Education level_____

Religion_____

Employment_____

Location (residence) rural, urban _____

Annual income _____

Living Status (homeowner or rent) _____

Date of hospital admission _____

Date of Participation/interview _____

II. Semi-structured interview questions

1. What is the existing support scheme provided for road traffic injury victims with Physical injuries due to road traffic accident?

   1.1 Would you please list support services that you have received from this facility?

   1.2 How did you get here or came to this facility?

   1.3 How did you receive the services?

   1.4 How many times you get the services?

   1.5 Do you think that the services are easily accessible?

   1.6 Do you think that the services are affordable?

   1.7 Have you got the treatment that you were expecting?

2. What is in-patient experience of people with physical injuries due to road traffic accident?
    2.1 Which service providers are providing the service for you?
    2.2 Do you think that the service providers are cooperative?
    2.3 Do you think that the services are inclusive?
    2.4 Are you satisfied with service delivery strategies?
    2.5 How you express the effectiveness of the services?
    2.6 Are you satisfied with the services?
    2.7 What will you suggest regarding quality of services?
3. What are the coping strategies of victims of road traffic accident develop when faced physical injuries?
    3.1 What was your reaction during the time you know that you are physically disabled?
    3.2 What strategy have you used in order to handle the current situation that you are in?
    3.3 What lessons have you acquired from this situation?
    3.4 Is there anyone assisted you during this time?
    3.5 How do you perceive the condition that you are in?
    3.6 What was the reaction of your care takers and family about your physical injuries?
    3.7 How did your families or friends react to your current condition?
    3.8 Where did you counseled on how to cope up with your physical injuries?

Appendix C: Amharic consent form

ቅጥያ ሀ

የተሳትፎ ፍቃደኝነት ማረጋገጫ

(በመንገድ ትራፊክ አደጋ ምክንያት ቋሚ አካሊዊ ጉዳት ሊጋጠማቸው ሰዎች የሚደረግ ድጋፍ ጥናት ማከናወን)

እኔ የዚህ ጥናት አድራጊ ቤተልሔም ጌታቸው እባላለሁ በአዲስ አበባ ዩኒቨርስቲ በሶሻል ወርክ ትምህርት ክፍል የድህረ ምረቃ ፕሮግራም በመከታተል ላይ እገኛለሁ፡፡ በአሁኑ ሰዓት በመንገድ ትራፊክ አደጋ ምክንያት አካሊዊ ጉዳት ያጋጠማቸው ሰዎች ገጠመኝ ጥናት በማካሄድ ላይ እገኛለሁ የጥናቱ አላማ የመንገድ ትራፊክ አደጋ ቋሚ አካሊዊ ጉዳት የደረሰባቸው ሰዎች ስለነበራቸው ገጠመኝ ጥናት ማድረግ ነው፡፡

በጥናቱ ለመሳተፍ የተሰጠ የፍቃደኝነት ማረጋገጫ

እኔ _____ በዚህ ዳሰሳዊ ጥናት ሊይ ተሳትፎ ለማድረግ ፍቃደኝነቴን አረጋግጣሇሁ፡፡

ምንም እንኳን አሁን ተሳታፊ ለመሆን ፍቃደኝነቴን ባረጋግጥም ወደ ፊት በጥናቱ ሂደት ላይ በማንኛውም ጊዜ ለጥያቄዎች ምላሽ ላለመስጠት መወሰን እንደምችል እና በዚህም ምንም አይነት አሉታዊ ውጤት እንደማይደርስብኝ እገነዘባለሁ፡፡ የጥናቱ አላማ እና ባህርያት በፅሁፍ የተገለፁልኝ ከመሆኑም ባሻገር ስለ ጥናቱ ጥያቄዎች ለማቅረብ የሚያስችለኝ እድል ተሰጥቶኛል፡፡ በጥናቱ ሊይ በመሳተፌ በቀጥታ የማገኘው ጥቅም አለመኖሩን እገነዘባለሁ ጋር ከእኔ የሚደረገውጋር የሚደረገው ቃለ መጠይቅ በድምጽ መቅረጫ እንዲቀረጽ ፍቃደኝነቴን የሰጠሁ ስለሆነ ሂደቱም አንድ ሰዓት ገደማ እንደሚፈጅ እረዳለሁ፡፡ በዚህ ጥናት ከእኔ የሚገኝ ሁሉም መረጃ ምስጥራዊነቱ ተጠብቆ እንደሚቆይ እገነዘባለሁ፡፡

ከዚህ ጥናት የሚመነጭ ማንኛውም ሪፖርት ላይ ስለ እኔ ማንነት የሚገልጽ መረጃ እንደማይቀርብ እና ይፋ እንደማይሆን አውቃለሁ ለዚሁ አላማ ሲባል ስሜን መቀየር እና በቃለ መጠየቅ ወቅት የምሰጣቸው ዝርዝር መረጃዎች እንዳይገለፁ ማድረግ ወይም ደግሞ የማነሳቸው

ሰዎች ማንነት በሚስጥራዊነት ተጠብቆ እንዲቆይ ይደረጋል፡፡ የተፈረሙ የፍቃደኝነት ማረጋገጫ ቅጾች ኦርጅናል የድምጽ መቅረጫ ውጤቶች የምርምሩ ውጤት በፊተና ቦርድ እስኪ ገለፅ ድረስ በአጥኚ ግለሰብ ዘንድ የሚቆይ መሆኑን አውቃለሁ፡፡ በዚህ ጥናት ዙሪያ ተጨማሪ ማብራሪያ እና መረጃዎችን ለመጠየቅ ጥናት አድራጊዋን ማነጋገር የምችል መሆኑን አውቃለሁ፡፡ የጥናት አድራጊዋ ስም፡ ቤተልሔም ጌታቸው

ስልክ ቁጥር፡ 0911-85-22-99

የጥናት ተሳታፊ ፊርማ

_____ ቀን _____

የጥናት አድራጊዋ ፊርማ

_____ ቀን _____

ተሳታፊው በበቂ መረጃ እና ግንዛቤ ፍቃደኝነቱን ማረጋገጡን አምናለሁ

ለተሳትፎዎ አአመሰግናለሁ !!!

Appendix D: Amharic In-depth interview Checklist

ቅጥያ ለ

የመጠየቅ መመሪያ

I. የተሳታፊ የግል መረጃዎች

እድሜ _____

ፆታ _____

የትዳር ሁኔታ _____

የልጆች ብዛት _____

የትምህርት ደረጃ

ሀይማኖት _____

የቅጥር ሁኔታ _____

የመኖሪያ አካባቢ (አድራሻ) _____

አመታዊ ገቢ _____

የመኖሪያ ሁኔታ(የቤት ባለቤት ወይም ተከራይ) _____

ሆስፒታል የገቡበት ቀን _____

በጥናት ውስጥ ተሳትፎ ለማድረግጠ የገቡበት ቀን _____

II. በከፊል የተዋቀሩ ጥያቄዎች

1. **በመንገድ ትራፊክ አ፧ጋ ምክንያት የአካል ጉዳት የደረሰባቸው ተጎጂዎች የሚሠጥ የድጋፍ መዋቅር ምንድን ነው? 1.1 ከዚህ ጤና ተቋም ያገኙት የድጋፍ አገልግሎት ካለ፣ እባክዎን በዝርዝር**

   ሉገልጹ ይችላሉ?

   1.2 ወደዚህ ጤና ተቋም በምን ዓይነት መንገድ ሉመጡ ቻሉ?

   1.3 ይህን አገልግሎት እንዴት ሉያገኙ ቻሉ?

   1.4 አገልግሎቶቹ ምን ያህል ጊዜ ተጠቅመዋል ?

1.5 እነዚህ አገልግሎቶች በቀላል ተደራሽ ናቸው ብለው ያስባሉ ?

1.6 የአገልግሎቶቹ ዋጋ ተመጣጣኝ ነው ብለው ያስባለ ?

1.7 ተስፋ አድርገው የነበሩትን ህክምና አግኝተዋል ?

2. በመንገድ ትራፊክ ምክንያት የአካል ጉዳት የደረሰባቸው ሰዎች የታካሚዎች የአስተኝቶ ማከም ተሞክሮ ምን ይመስላል?

2.1 እርስዎ ተጠቃሚ የሆኑበትን አገልግሎት የሚሰጡት አገልግሎት ሰጪዎች የትኞቹ ናቸው ?

2.2 አገልግሎት ሰጪዎቹ ተባባሪ ናቸው ብለው ያስባለ ?

2.3 አገልግሎቶቹ በተጨባጭ ተግባራዊ ናቸው ብለው ያስባለ ?

2.4 የአገልግሎት አሰጣጥ ስትራቴጂዎች አመርቂ ናቸው ብለው ያስባለ ?

2.5 የአገልግሎቶችን ውጤታማነት እንዴት ይገልጻሉ ?

2.6 በሚያገኙት አገልግሎት እርካታ አግኝተዋል?

2.7 ስለ አገልግሎቶቹ ጥራት ምን አይነት አስተያየት አልዎት ?

3. የትራፊክ አደጋ ሰለባዎች ከደረሰባቸው አካሊዊ ጉዳት አንጻር ህይወትን መቀጠል የሚያስችሏቸው ስትራቴጂዎች የትኞቹ ናቸው ?

3.1 እርስዎ አካል ጉዳት የደረሰብዎት መሆኑን ባወቁ ጊዜ ምን አይነት ስሜት አሳደረብዎት ?

3.2 አሁን የሚገኙበትን ሁኔታ መቋቋም እንዲረዳዎት ምን አይነት ስትራቴጂ ተጠቅመዋል ?

3.3 አሁን ካሉበት ሁኔታ ምን ዓይነት ጠቃሚ ተሞክሮ ወይም እውቀት ገብይተዋል ?

3.4 አሁን ባሉበት ሁኔታ ውስጥ ድጋፍ ያደረገልዎት/እያደረገልወት ያለ ግለሰብ አለ?

3.5 አሁን ያለበት ሁኔታ እንዴት ይመለከቱታል?

3.6 ስለደረሰብዎ የአካል ጉዳት የተንከባካቢዎ ወይም የቤተሰብዎ አቀባበል እንዴት

ነበር?

3.7 **እርስዎ አሁን ያሉበትን ሁኔታ ቤተሰብዎችዎ ወይም ጓደኞችዎ እንዴት ይመለከቱታል?**

3.8 **ካጋጠመዎት የአካል ጉዳት ጋር እንዲሊመዱ የሚረዳ የምክክር አገልግሎት የት ነው የሚሰጡት?**