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# Victims of Road Traffic Accidents in Ethiopia: Their Experiences and Coping Strategies

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#### **Abstract**

The rising incidence of physical injuries from road traffic accidents in developing countries significantly impacts individuals' psychological well-being and social connections. Most existing studies, which are predominantly quantitative, focus on accident causes and prevention methods; they often overlook the lived experiences of victims. This qualitative phenomenological study aimed to delve into the often overlooked experiences and coping strategies of individuals with physical injuries resulting from road accidents, using in-depth interviews with ten participants. Thematic analysis revealed that while support was available from various sources. it was often incomplete and delayed. Additionally, uninformed medical decisions were common, with individuals receiving little explanation about their condition or future treatment. Hospitalization was generally viewed negatively, and coping strategies included support from loved ones and resilience drawn from personal experiences developed during the recovery process. Recognizing these sources of support is crucial for facilitating adaptation and improving overall quality of life. The study highlights the vital role of the social work profession in offering emotional and psychosocial support and improving communication between patients and the medical team to address mental health challenges.

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#### Introduction

Road traffic accidents (RTAs) are a leading cause of death, injury, and long-term physical disabilities, affecting individuals' cognitive, behavioral, emotional, and physical functions. The World Health Organization (WHO, 2018) ranks road traffic injuries (RTIs) as the eighth leading cause of physical disability, highlighting the urgent need for comprehensive preventive measures. Globally, approximately 1.35 million people die annually due to road crashes, with up to 50 million suffering injuries. Alarmingly, deaths from RTIs among males aged 15–59 exceed those caused by malaria, diabetes, and respiratory or digestive diseases (WHO, 2018).

Disabilities resulting from RTIs place a heavy economic and social burden on victims and their families, limiting both physical and mental capabilities (Dell Orto & Power, 2007). While the severity of this issue is more pronounced in developing countries, road traffic injuries remain a significant health concern worldwide. The risk of fatalities is closely linked to a country's income level, with lax regulations on speed limits, child restraints, and drunk driving worsening the situation in many African countries. Inadequate post-crash care further compounds the challenges survivors face (Kopits, 2004).

Ethiopia, unfortunately, ranks among the worst in terms of RTIs, with 170 fatalities per 10,000 vehicles (WHO, 2018). More than 20% of RTIs in Ethiopia each year are fatal, indicating severe deficiencies in pre-hospital and emergency medical services. The rising trend of injuries and fatalities, at 10% and 17% annually, respectively, underscores the urgent need for intervention. The economic impact is significant, estimated at 340–430 million Ethiopian Birr (ETB) per year, representing 0.8–0.9% of the gross domestic product (WHO, 2018).

While most studies focus on the prevalence, magnitude, risk factors, outcomes, and trends of RTIs (Abegaz & Gebremedhin, 2019; Asefa et al., 2014; Bedaso et al., 2020; Denu et al., 2021; Tiruneh et al., 2019; Woyessa et al., 2021), this study takes a different approach by exploring the post-crash experiences of victims during hospitalization. Unlike quantitative studies, which emphasize statistical data, this research delves into the personal experiences and adaptive mechanisms of road traffic injury victims after the accident. There is limited literature on the lived experiences of traffic injury victims, particularly in relation to Ethiopians (except for a few studies, such as Daniel, 2010). Given the complexity of RTAs, the researchers identified the need for further studies to explore the lived experiences of victims and how they cope with the aftermath.

#### Literature review

# The intensity of road traffic accidents

Globally, an estimated 1.35 million people die in road crashes each year, with up to 50 million more sustaining injuries (WHO, 2018). RTAs rank eighth among the leading causes of disability worldwide. African countries, in particular, experience the highest mortality rates, with 28.3 deaths per 100,000 people. The rapid motorization and other contributing factors in Africa have escalated the problem, especially among the most economically active age group (15–59). Males in this group are three times more likely to suffer from road traffic injuries (RTIs) than females. In Sub-Saharan Africa, 5% of male deaths aged 15–59 are due to RTIs, a figure that rises to 6.5% among those aged 15–29 (WHO, 2015). These figures indicate a rising trend in road traffic fatalities.

In developing countries, a significant portion of road fatalities involve vulnerable road users like pedestrians and cyclists. In Ethiopia, pedestrian injuries account for 84% of road traffic fatalities, contrasting sharply with 32% in Britain and 15% in the United States (Bunn & Collier et al., 2003). Ethiopia ranks second in East Africa for the intensity of traffic accidents (Honelgn & Wuletaw, 2020, as cited in Demeke & Wondmagegn, 2023). According to Demeke and Wondmagegn (2023), RTAs in Ethiopia disproportionately affect the productive segment of the population, resulting in deaths and injuries. Those at greater risk include males, individuals from wealthier households, motorcyclists, cyclists, and pedestrians.

Traffic accident records often involve multiple variables. A dataset of traffic records from Addis Ababa (2017–2020) compiled by Bedane includes details such as driver demographics, weather conditions, infrastructure, and accident severity. The data show that 12,316 road traffic accidents occurred during this period, influenced by 15 factors, such as driver age, sex, education, driving experience, road conditions, and weather (Demeke & Wondmagegn, 2023).

A study spanning 11 years (2007/08 to 2017/18) reported 291,577 road traffic accidents in Ethiopia, based on data from the Ethiopian Federal Police Commission, Ethiopian Road Authority, and Ethiopian Federal Transport Authority. These accidents resulted in 36,796 fatalities, 54,731 serious injuries, 58,987 minor injuries, and 141,063 instances of property damage. The annual average for fatalities, serious injuries, minor injuries, and property damage was 3,345; 4,976; 5,362; and 12,824, respectively (Deme, 2019).

The frequent and severe impacts of RTAs in Ethiopia can be attributed to driver behavior, poor vehicle conditions, animals and carts on highways, pedestrian carelessness, weak traffic law enforcement, inadequate emergency services, and insufficient road safety measures (Persson, 2008).

Hospital data reveal that 6% of road traffic injury victims die within 24 hours of admission, 12.5% survive with long-term disabilities, and 81.5% recover

without long-term effects (Hailemichael & Suleiman, 2015). In more than half of these cases, 68% of patients were discharged, 17% were hospitalized, 17% were referred, and 1% died (Getachew & Ali, 2016). Most road traffic accident victims (90.5%) were treated conservatively, while 9.5% required surgery. Of these, 75.6% improved without complications, 15% were discharged with disabilities, and 9.4% died (Negesa & Dessie, 2017).

Beyond the human toll, RTAs have a significant economic impact. The UN (2009) estimates that road crashes cost low-income countries like Ethiopia approximately 1% of their GDP, with some countries losing up to 3% (Sleet et al., 2011, as cited in Demeke & Wondmagegn, 2023). According to Deme (2019), Ethiopia lost approximately 36.3 billion birr due to road traffic accidents over the 11-year period from 2007/08 to 2017/18.

# Coping strategies among survivors of Road Traffic Accidents (RTAs)

The consequences of traffic accidents on individuals are profound. Daniel (2010), in his study on the psychosocial effects of road traffic injuries in Ethiopia, highlighted that such injuries have both social and psychological impacts on victims. Social effects include disruptions in victims' social relationships, challenges in work life, changes in body image, health issues, and strains on family relationships. Psychologically, victims experience a range of emotions such as fear, depression, guilt, anger, and the development of hostile behaviors, as well as a fear of traveling. These outcomes underscore the need for victims to adopt effective coping strategies.

Some researchers have examined the coping strategies of traffic accident survivors using psychological assessment tools. Aroraet al. (2023) explored coping strategies among motor vehicle accident survivors in a hilly state of North India, categorizing them into three domains; problem-focused, emotion-focused, and dysfunctional. Their study, which assessed 250 Motor Vehicle Accident Survivors (MVAS) using the Brief COPE (Coping Orientation to Problems Experienced) questionnaire (a standard questionnaire with 28 items to measure effective and ineffective ways to cope with stressful life situation), found that emotion-focused strategies—such as seeking emotional support and positive reframing—were the most commonly used. These strategies were preferred because they help manage emotional responses, even though they do not directly address the stressor itself. In contrast, problem-focused coping, which is generally considered more adaptive, and dysfunctional strategies like substance abuse and denial were used less frequently. The study also highlighted that religious beliefs, emotional support, and acceptance played significant roles in coping, reflecting the cultural importance of family support and spirituality in recovery. Maladaptive strategies, including substance use and disengagement, were less common, illustrating the protective

role of strong social support systems in mitigating trauma and improving recovery outcomes.

Another study by Martín et al. (2017) examined the evolution of coping mechanisms among hospitalized adults with musculoskeletal trauma from traffic accidents. Initially, patients tended to use emotion-focused strategies, such as seeking emotional support, to manage their distress. Over time, however, many transitioned toward more adaptive, problem-focused strategies, including practical problem-solving and cognitive re-evaluation. The study found that eight out of eleven patients improved their coping ability from moderate to high levels by discharge, reflecting their capacity for adaptation and post-traumatic growth. The hospital environment and available psychosocial support played crucial roles in facilitating this shift, enhancing patients' problem-focused coping and overall recovery.

The two studies corroborate each other in that Arora et al. (2023) found emotion-focused coping strategies to be more commonly used than dysfunctional or problem-focused strategies. This coping style often involved seeking emotional support, reframing the situation positively, and accepting the reality of the trauma. The findings suggest that religion and emotional support are heavily relied upon by survivors, particularly in cultures with strong family dynamics, such as India. The study concluded that emotion-focused coping is commonly adopted by survivors who suffer from Post-Traumatic Stress Disorder (PTSD) or depression following the accident, with family and religious support playing vital roles in their recovery.

However, in Ethiopia, studies focused on coping strategies among road traffic accident survivors are sparse, making it difficult to fully understand their experiences. As various studies suggest, physical injuries resulting from road traffic accidents are prevalent in Ethiopia, yet significant efforts toward prevention, treatment, and rehabilitation remain lacking. Support for individuals with physical injuries at healthcare facilities is often inadequate or entirely absent. Therefore, this study aims to explore the experiences and coping strategies of individuals with physical injuries due to road traffic accidents in Ethiopia.

#### Methods

#### **Study setting description**

Tikur Anbesa Specialized Hospital is Ethiopia's largest public hospital and one of the few University Hospitals in the country. It operates 24 hours a day for emergency services and is administered by Addis Ababa University. As a referral center, it serves approximately 370,000–400,000 patients annually. The hospital has 800 beds and a team of 130 specialists, playing a critical role in diagnosis and treatment (Website: Addis Ababa University).

# Research design

The objective of this study was to assess the experiences and coping strategies of individuals with physical injuries resulting from road traffic accidents. To achieve this, the study employed an exploratory qualitative research design to investigate the existing support for victims with physical disabilities due to road traffic injuries. Exploratory designs are appropriate when a research area is relatively unexplored. It often uses qualitative data to help researchers gain a basic understanding of facts, settings, and concerns, allowing for the formulation of more precise research questions (Krueger & Neuman, 2006).

Descriptive phenomenology was applied to this research due to the limited knowledge surrounding the subject. As a qualitative design, phenomenology is well-suited to exploring participants' perceptions and experiences, in this case, those affected by road traffic accidents. This approach facilitated an in-depth exploration of the victims' lived experiences, either as individuals or through shared meanings. In line with phenomenological methods, data was gathered using in-depth interviews with semi-structured questions.

#### Methods of data collection

Data for the study was collected through participant interviews using purposive sampling, which allowed for the selection of individuals based on their relevant experiences and knowledge. Creswell (2016) explains that purposeful sampling involves selecting participants who have direct experience with the phenomenon under investigation, ensuring that significant and meaningful experiences are captured. In this study, ten interviews were conducted with patients admitted to Tikur Anbesa Specialized Hospital, all of whom had physical disabilities caused by road traffic accidents. Despite their injuries, all participants agreed to take part in the study, with some enduring lengthy interviews to share their lived experiences. The researchers ensured the participants' comfort throughout the data collection process.

All participants were over the age of 18 and had been hospitalized for more than one month, allowing for the selection of relatively stable individuals following their accidents. Six participants were male and four were female. Seven participants were admitted to the orthopedic ward, and three were in the surgical ward. In-depth interviews were conducted to explore participants' emotions, feelings, and opinions regarding their injuries (Creswell, 2016). To ensure the study's objectives were met and data trustworthiness was maintained, the researchers relied on interviews to capture the participants' direct voices. An interview protocol was developed and pilot tested with five patients to ensure question clarity, with necessary refinements made. Interviews were audio-recorded, and field notes were taken to enhance data collection. The interviews

were scheduled based on participants' preferences to ensure reliable information and participant comfort. Seven interviews were conducted in the orthopedic ward, and three were held in the surgical ward. The interviews, which lasted between 45 and 80 minutes, were conducted face-to-face with participants' informed consent. Audio recordings and detailed notes were taken during the interviews.

The in-depth interview guide included questions on the participants' sociodemographic information and explored the support and services provided to road traffic injury victims with physical disabilities. The guide also inquired about the participants' in-patient experiences, including their evaluations of the comprehensiveness of services and their views on the service providers. Additionally, the guide covered the coping strategies used by participants to deal with their physical injuries.

#### **Ethical considerations**

Following ethical clearance from the School of Social Work's ethical review committee at Addis Ababa University, the researchers informed the Medical Director of Tikur Anbessa Specialized Hospital about the study's objectives and purpose. Permission was subsequently obtained from the Research Committee of the Orthopedics and Surgical Ward to carry out the research.

Participants were clearly informed that their participation was entirely voluntary. They were free to withdraw from the study at any time and could choose not to answer any questions that made them uncomfortable. Written and verbal consent was carefully obtained from each participant to ensure they fully understood and acknowledged their involvement in the study.

#### Data analysis

The study employed thematic analysis to extract key themes from the data collected through in-depth interviews. The researchers followed Braun and Clarke's (2006) 6-step framework to identify themes and address the research questions. These steps included familiarizing with the data through repeated reading, generating initial codes, searching for themes by grouping codes, reviewing and refining themes, and finally, documenting the findings. The analysis process began with familiarization, as the researchers repeatedly read the transcribed audio records to gain a comprehensive understanding of the dataset, taking notes to capture core insights. In the second step, they generated initial codes by reviewing the data, identifying recurring themes like support from family, friends, and medical sources, which aligned with the research questions. These codes were then refined directly within the transcript documents. Next, the researchers grouped related codes into preliminary themes, such as "Existing support schemes," based on recurring patterns in the data. In Step 4, the

preliminary themes were reviewed to ensure coherence, with the researchers asking whether each theme made sense. They revisited the data to validate and, if necessary, modify the themes, as with the refinement of "Existing support schemes," which overlapped with "Medical support during hospitalization" and the first research question. In this stage, some codes were also reassigned to better reflect their significance. In the fifth step, the researchers refined and defined each theme, clarifying what each represented and exploring how subthemes connected to the main themes and to each other. This led to the identification of three major themes, ten sub-themes, and five codes. Finally, in Step 6, the researchers compiled their findings into a cohesive report, which serves as the foundation of the article

# **Findings**

All participants in the study were aged eighteen or older and had physical disabilities resulting from road traffic injuries. Each participant's duration of hospital admission exceeded one month, with seven admitted to the orthopedics ward and three to the surgical ward at Tikur Anbessa Hospital. In terms of employment, eight of the participants were employed. The marital status of the respondents was varied: four were married, three were single, two were divorced, and one was a widower. The gender distribution included six males and four females. Regarding educational status, all but three participants had completed education beyond the primary level. Road user classification indicated that four participants were pedestrians, one was a driver, and five were passengers. In terms of injury types, seven participants experienced amputations, while three had paralysis.

Thematic analysis of the data uncovered three major themes: hospital inpatient support, victims' experiences during their hospital stay, and the process of adapting to sudden physical disabilities. The first two themes address the individuals' experiences with the encounters and the informal and formal services provided to them, while the third theme focuses on their coping strategies.

# Theme one: Hospital inpatient support

Individuals recovering from road traffic injuries find solace in social and partial treatment support during their hospitalization. Participants highlighted the importance of support from family, friends, colleagues, neighbors, and fellow patients, encapsulated within the sub-theme "Support of the Loved Ones." Additionally, the term "partial treatment support" emerged, indicating a focus on specific aspects of treatment.

The role of "Support of the Loved Ones" is pivotal during and after hospitalization for road traffic injury victims. The participants emphasized the connection between recuperating physical health and having a robust social support system. Those lacking such support structures were described as more likely to endure persistent pain and face challenges returning to normal life. Social support, as mentioned by study participants, encompassed financial, emotional, and spiritual dimensions.

Family support, identified as a cornerstone, was particularly emphasized during interviews. Participants expressed feeling respected, loved, and a sense of belonging within a social system that shared responsibilities and interactions. For those who were single, parents played a significant role, while for married participants spouses were crucial. Families provided assistance in daily activities, offered emotional support, addressed psychological needs, provided entertainment, contributed financially, instilled hope, and acknowledged the highs and lows of life. For instance, a participant recounted the following:

My father tried so many things to reassure me about my current condition. He visited and consulted traditional healers because he was stressed too and didn'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 (Participant 1).

Parents, often considered the second victims, undergo emotional challenges when witnessing their children in distress. Another participant shared:

I hug my mother to get relaxed emotionally and I can easily handle problems even when I am embarrassed. My mom has helped me so much. She has been with me since the day of the accident. She never cared about anything other than me for the last two months (Participant 3).

Emotional well-being emerged as a critical aspect of the treatment process, aiding victims in effectively managing their situation and adapting to change. Participants shared experiences of emotional support, including a participant who overcame suicidal thoughts with the help of a brother and his friend, a disabled soldier.

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 by sharing their experience. His friend is a soldier with a disability, and

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he teaches me how to use my left hand and deal with the problem that I am in (Participant 1).

Financial concerns surfaced as one of the foremost worries for individuals with physical disabilities resulting from road traffic injuries. Medical expenses, coupled with limitations in income-generating activities during hospitalization and post-amputation, posed significant challenges. However, participants expressed gratitude for the generous familial financial support, with one participant noting:

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 on me. In addition to financial help, they gave me morale. I felt like I couldn't walk. My mother said: 'Do not worry. We will somehow buy an artificial leg for you' (Participant 2).

The role of spouses emerged prominently as a vital support feature, with many participants highlighting their spouse as the primary and indispensable source of support. Spouses were described as essential supporters, close friends, and diligent companions in navigating the challenges arising from amputation. A female participant shared the following:

My husband was a conservative person; he never helped me with the house chores. He strongly believed that household works are only for women. He even expected it from me when I was sick. Now his attitude changed 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 on the hospital floor, never moving his eyes from me; he cares for me like a child (Participant 4).

Another participant highlighted the remarkable support from his wife, emphasizing her resilience and pride. Despite facing financial challenges, his wife maintained her composure and independence, working tirelessly to support him in the hospital. The participant expressed gratitude for her unwavering assistance in various aspects of his life.

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 (Participant 6).

# Variability in family support

While most participants acknowledged the family, especially their parents and the spouse, as crucial for coping with daily challenges, some reported the absence of support. A participant revealed the emotional toll of his wife, leaving him without familial assistance. He emphasized the significance of family and relative support, lamenting the lack of a support system.

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, who can care for them, and they are better than me (Participant 3).

## Experience of divorce crisis

Another participant faced a divorce crisis after becoming disabled, with her husband cheating during her hospitalization. However, she found solace in the support of her brothers and sisters, whom she considered gifts from God.

The divorce process was very tough in addition to my sudden disability. Instead of apologizing for cheating on me, my ex-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 problems were my brothers and sisters; I am glad that I am part of this precious family (Participant 7).

## Intimate relationships and peer support

Intimate friends emerged as a valuable support network, providing relaxation, mutual support, and a sense of security. Despite the positive emphasis on friend support, one participant expressed the loss of friends after becoming disabled, contributing to feelings of isolation.

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 (Participant 1).

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Peer support among patients with similar experiences was highlighted as an effective means of coping. Sharing common challenges and understanding each other's struggles fostered a sense of comfort and support. One of the participants said "We're more comfortable with each other. We understand each other more easily. We look at each other in problems; I feel better when I talk and play with others" (Participant 8).

#### Support from caregivers and neighbors

Caregivers of fellow patients played a significant role in providing support for those without family assistance. A participant described how the families of other patients cared for him when he had no one.

I have no one to take care of me; I was alone when I was admitted to this hospital. The nurse told me that an ambulance brought me here. I lost my phone during the accident. I couldn't memorize any of my families' cell-phone numbers. I don't even remember the place where I come from [though not clear what he meant by this], 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 (Participant 4).

Neighbors also played a crucial role in providing support, especially in emergency situations. A participant shared how neighbors cared for her children when she was unable to do so.

When I was brought to this hospital I left my two children behind. I talked to them after a week through my neighbor. Since the accident, they have been taken care of by my neighbors. My neighbors are doing everything for my children (Participant 3).

#### Colleague support and workplace dynamics

Colleague support was recognized as valuable, with participants highlighting the financial and emotional assistance received. However, one participant expressed dissatisfaction with the lack of understanding and attention from his boss.

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 (Participant 6).

The complaint might raise a controversy as the boss might not be in a position to leave the position vacant.

# Healthcare providers' support: Treatment and communication

Participants described the support received from healthcare providers based on diagnosis history. However, concerns were raised about the limited scope of medical support, focusing primarily on physical injuries. Some participants felt neglected, emphasizing the need for comprehensive medical care that addresses both physical and psychological aspects.

There is no other special service designed to support a patient with a disability like me. Even routine medical services are expensive and difficult to get. Moreover, since I migrated from Tigray region, there is no special consideration provided for me as a migrant. I expected many services from this facility but sadly they couldn't provide it for me. They are providing only medical support (Participant 1).

Participants expressed the importance of informed decision-making in medical interventions, emphasizing the need for discussions about procedures and potential risks. For instance, Participant-4 stated the following narrative though the views of the medical personnel could be different on the point.

I knew that my left leg had been removed after I regained consciousness; I couldn't control myself and lost consciousness again. When I 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 an amputee (Participant 4).

## Concerns about delayed and uninformed medical decisions

Issues of delayed service provision leading to complications and uninformed medical decisions were highlighted by participants. The impact of delayed treatment and decisions on the overall medical outcome was underscored. A participant said the following on this point:

I got service after three days due to corona; all healthcare 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

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the treatment was immediate my leg might have been saved from amputation (Participant 5).

Participants expressed a desire for respectful communication from medical personnel and the right to be informed about medical decisions, especially in situations where they were unable to decide for themselves. For instance, Participant-6 mentioned the following

I am still not clear about 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 nightmare (Participant 6).

# Theme two: Patients' hospital experience

## Challenges in hospital admission process

The admission of road traffic victims to inpatient care is a complex process requiring coordination among various stakeholders within the healthcare system. Ineffective admission processes can result in prolonged wait times, staff frustration, and a negative patient experience. Participants characterized their hospital admission experience as a "dark and long journey," marked by "struggling with psychological insecurity" and a "disturbing environment." Participant-10 can be a typical example stating the following

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 hurts me a lot since I can't do anything because I am just one of them" (Participant 10).

## Patient discontent with hospital environment

Many participants expressed dissatisfaction with being admitted to the hospital, citing unpleasant events involving fellow patients and healthcare providers. Some participants criticized the lack of empathy from certain nurses and observed drained service providers, adding to their distress.

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 makes me observe a tired service provider which is an additional pain (Participant 5).

# Psychological insecurity during admission

During hospitalization, victims faced significant psychological challenges, including flashbacks, insomnia, fear of the future, and feelings of guilt. Participants vividly recalled traumatic moments from their accidents, indicating a heightened state of psychological distress. For instance, a participant said "Ever since I regained consciousness, I have been memorizing every scene of the accident; especially, the moment I saw individuals smashed and killed by the truck is an unforgettable moment" (Participant 7).

## Concerns about confidentiality and privacy

Participants raised concerns about the lack of confidentiality in the healthcare service provision, expressing discomfort when healthcare providers disclosed their health information in the presence of other patients. The following is an example capturing this:

The doctors and nurses never cared about what other patients say after knowing my health status. Healthcare providers always disclose my results concerning my health in the presence of other patients, which reminded me about a lack [breach] of confidentiality (Participant 6).

## Challenges with hospital room conditions

Victims anticipated hospital rooms to be peaceful environments conducive to healing but overcrowding and lack of amenities contributed to a less-than-ideal setting. In describing this point a participant stated "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" (Participant 2).

#### Expectations for supportive hospital settings

Participants emphasized the need for hospital settings designed to support patients in their journey to wellness. They highlighted the importance of creating an environment that reassures their comfort, considering hospitals should not add to the problems patients are already facing, as they argued. For instance, a participant capitalizes on this point:

The hospital administrator never thinks of installing TV in the room; it is very essential not only for entertainment, but it can also help us to forget our problems. It could help me avoid excessive thinking about my current situation (Participant 7).

# Perception of hospitalization as a form of confinement

Almost all victims likened their situation to being in jail due to restricted movement and dependence on others for daily activities. Participants expressed the challenges of relying on others, even for personal hygiene. A typical narrative of such a situation is as follows: "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' hands" (Participant 3).

# Disability as a form of rebirth and dependence

During their hospital stay, some victims perceived their disabilities as a form of rebirth, requiring them to relearn basic activities. Participants expressed feelings of being dependent, equating their situation to that of a child learning to walk. For instance, a participant said: "This event is like a 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" (Participant 1).

#### Fear of being a burden and losing loved ones

Victims expressed constant fear of burdening their loved ones, anticipating that caregivers would eventually get tired of providing support. Some participants felt their disability might lead to strained relationships. The fear seems very deep as stated in the next narrative:

Due to my disability I end up surrendering, which I never imagined before; now I am under the 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 (Participant 10).

#### Reflection on the severity of injury

Participants reflected on the potential differences in their experiences if their injuries were on the opposite side of their bodies. The challenges of adapting to newfound limitations, especially when previously dominant limbs are affected, were highlighted. A 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 (Participant 1).

# Theme three: Adapting to sudden physical disability

# Impact of victims' strength on coping

The severity and impact of injuries vary, influenced by the resilience and strength exhibited by the victims. Some victims perceive traumatic events as manageable, while others view them as life-altering. Coping mechanisms employed by individuals differ, with social support, peer interaction, and a focus on positive life experiences emerging as common strategies during the interviews. One participant states

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 (Participant 1).

# Spousal and parental support as coping tools

Participants emphasized the pivotal role of spousal and parental understanding and dedication in overcoming challenges and mobility limitations resulting from amputation. Spouses contributed significantly to boosting confidence, providing comfort, encouragement, and fostering spiritual well-being. One example of this is given by a participant as follows:

Even if I am a sort of 24/7 job for them, my family are the people who have helped me going 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 (Participant 1).

#### Adaptation time and coping strategies

Those with multiple injuries often face more challenges and exhibit fewer coping mechanisms than individuals with specific injuries. The type and location of trauma influence the time needed for adaptation and the strategies employed. Observing others with similar or more significant challenges becomes an effective means of adapting to the current state. Victims also engage in activities like playing and talking with others to distract themselves from dwelling on their situation. In this regard a participant observed the following: "I have learned a lesson from others, I have seen patients who have lost both their hand and leg in this room due to a car accident and hope for the future, and thus they taught me many things" (Participant 5).

# Family, peers, colleagues, and friends as pillars of support

Acknowledging the love and caring devotion of family, parents, peers, colleagues, and friends becomes a driving force for victims to cope with their problems and continue living alongside their loved ones. Participants expressed gratitude for the unwavering support and companionship they received. For instance, a participant said:

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 (Participant 6).

## Personal life experience as a source of strength

Victims draw strength from personal life experiences as well, recognizing the value of facing challenges. Some believe that encountering difficulties, both in their own lives and through the experiences of others, provides valuable lessons. The perception that challenges contribute to the making of strong individuals resonated among participants. The following narrative captures this point.

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 teaches me so many things. I have overcome 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 to my resistance to this problem too" (Participant 3).

#### Discussion

Support plays a crucial role in the recovery of individuals affected by road traffic injuries (RTI) throughout the pre-hospital, hospital, and post-hospital phases, addressing the diverse needs of victims. Without sufficient support, the likelihood of victims returning to their normal lives is significantly reduced. This study identified two key dimensions of support as perceived by victims: "Support from loved ones" and "partial treatment support."

Participants consistently emphasized the vital role family support played in their recovery journey. Beyond providing practical assistance, family members instilled hope, encouragement, and a sense of belonging. This finding aligns with Pistulka's (2002) research on the relationship between stress, social support, and depression. On the contrary, one participant highlighted the psychological toll of marital separation when a spouse was unable to cope with the aftermath of the

injury, a finding consistent with Faramarzi's (2011) assertion that a spouse's response significantly impacts the injured individual's mental health.

The study also highlighted the supportive role of friends during hospitalization, echoing Rambod and Rafii's (2010) findings on the positive influence of companionship in overcoming challenges. However, participants also noted a potential decline in friends' attention over time, reflecting Lew's (2007) observation of the evolving dynamics of long-term patient support.

Peers emerged as another valuable source of support, especially within social networks of individuals with similar health conditions. This aligns with Hildingh and Fridlund's (2004) observations on the benefits of social support groups in promoting recovery through shared experiences and mutual encouragement. Colleagues and neighbors were also recognized as important support sources, helping participants regain normalcy. This finding aligns with Dolan et al.'s (2008) work on the influence of workplace support on employees' health and quality of life. The study further underscored the critical role hospitals play in delivering timely, quality care, stressing the importance of immediate intervention to save lives and ensure positive long-term outcomes. Participants noted that delays in medical decisions could have severe long-term consequences for survivors.

During hospitalization, participants reported receiving only partial treatment support, emphasizing the value of even routine care in promoting their well-being. This finding resonates with WHO (2009) recommendations for providing adequate support to trauma survivors.

Negative experiences during hospital admission were common, with participants describing their hospital stay as a "dark and long journey," marked by psychological struggles and a disturbing environment. Halvorsrud et al. (2016) emphasized the importance of understanding individual patient journeys to improve healthcare delivery by focusing on the patient's perspective.

In conclusion, the study found that social support, peer networks, and a focus on positive life experiences were essential coping mechanisms for individuals with physical disabilities. These findings affirm the critical role of family and peer support in facilitating recovery.

#### Conclusions

Given the myriad societal, physical, and psychological challenges faced by victims of road traffic injuries, strategically evaluating and strengthening support systems is essential for aiding their adaptation and promoting overall well-being. During hospital admissions, victims receive not only medical care from healthcare professionals but also vital social support from family, peers, friends, neighbors, and colleagues. While some may view 'partial treatment' support negatively, victims acknowledge its importance in collaboration with healthcare providers for

their well-being. However, they often perceive this support as limited and repetitive, primarily focusing on physical treatment, with delayed assistance compounding the issue. Many victims express dissatisfaction with uninformed medical decisions before and after procedures, considering the quality of inadequate partial treatment support.

Regarding their hospital experiences, many victims describe hospitalization as a source of heightened anxiety due to strained relationships with healthcare providers, a disruptive environment, and other challenges. Conversely, some find comfort in the hospital setting, viewing it as a safe space. Understanding individual patient journeys can significantly enhance service quality in hospitals. Victims highlight the crucial role of social support—religious, familial, and peer networks—in their coping mechanisms, asserting that such support facilitates adaptation through meaningful social interactions.

# **Implications for social work**

Experiencing a road traffic injury and subsequent physical disability presents significant emotional and physical challenges, impacting not only the individuals affected but also their families and broader social networks. The complex nature of this traumatic experience necessitates a range of interventions, and social workers can play a vital role through counseling, education, and psychosocial support. This research emphasizes that individuals with physical disabilities primarily receive social and partial medical treatment support, highlighting the urgent need for additional assistance that addresses emotional and psychological needs. Educational interventions could focus on training individuals and their families in effective coping skills to mitigate the adverse effects of road traffic injuries. Social workers can also educate patients on resource utilization and help them navigate interactions with healthcare professionals. Furthermore, advocacy for policy development and implementation at national or agency levels is crucial to enhance comprehensive support for those with physical disabilities resulting from road traffic injuries.

The study also reveals the profound impact of road traffic injuries on victims' psychological, physical, and social well-being, with potential consequences including brain injuries and mental health disorders. Future research could explore traumatic brain injuries resulting from road traffic incidents as a significant area of inquiry. Additionally, examining the extensive effects of road traffic injuries on family caregivers presents another valuable research opportunity, focusing on the psychological and social impacts on victims' families. Further studies could investigate the practical, methodological, and ethical challenges involved in capturing the full patient journey experience, employing diverse data collection methods and approaches.

The findings illuminate the challenges faced by victims during hospital treatment, including issues related to medical decision-making, confidentiality, and the overall quality of treatment support. These challenges can serve as critical entry points for developing policies and operational procedures that ensure high-quality, comprehensive, and timely treatment. Healthcare administrators can use these results as a foundation for enhancing patient-centered support services. By considering the overall patient experience, service performance, and medical pathways, administrators may be able to innovate treatment services that benefit both patients and healthcare organizations.

#### References

- Abegaz, T., & Gebremedhin, S. (2019). Magnitude of road traffic accident-related injuries and fatalities in Ethiopia. *PloS One*, 14(1), e0202240. https://doi.org/10.1371/journal.pone.0202240
- Addis Ababa University.(n.d.). Tikur Anbessa Specialized Hospital. <a href="https://www.aau.edu.et/chs/">https://www.aau.edu.et/chs/</a>
- Arora, D., Belsiyal, X. C., & Rawat, V. S. (2023). Coping strategies adopted by motor vehicle accident survivors from a hilly state of North India. *Indian Journal of Psychological Medicine*, 45(1), 59–64.
- Asefa, F., Assefa, D., & Tesfaye, G. (2014). Magnitude of, trends in, and associated factors of road traffic collisions in central Ethiopia. *BMC Public Health*, 14, 1-11.
- Bedaso, A., Kediro, G., Ebrahim, J., Tadesse, F., Mekonnen, S., Gobena, N., & Gebrehana, E. (2020). Prevalence and determinants of post-traumatic stress disorder among road traffic accident survivors: A prospective survey at selected hospitals in southern Ethiopia. *BMC Emergency Medicine*, 20, 1-10.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

# https://doi.org/10.1191/1478088706qp063oa

- Bunn, F., Collier, T., Frost, C., Ker, K., Roberts, I., & Wentz, R. (2003). Areawide traffic calming for preventing traffic-related injuries (Cochrane Review). *The Cochrane Library*, (1).
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.
- Daniel, G. (2010). *The psychosocial effect of road traffic injury in Addis Ababa*. Unpublished manuscript.
- Deme, Debela.(2019). Road traffic accident in Ethiopia from 2007/08-2017/18. American International Journal of Sciences and Engineering Research, 2(2), 49-59.
- Dell Orto, E., & Power, W. (2007). *The psychological and social impact of illness and disability* (5th ed.). Springer Publishing Company.
- Demeke Endalie & Wondmagegn Taye Abebe (2023). 'Analysis and Detection of Road Traffic Accident Severity via Data Mining Techniques: Case Study Addis Ababa, Ethiopia' *Hindawi Mathematical Problems in Engineering;* Volume 2023, Article ID 6536768, 9 pages https://doi.org/10.1155/2023/6536768
- Denu, Z. A., Osman, M. Y., Bisetegn, T. A., Biks, G. A., & Gelaye, K. A. (2021). Prevalence and risk factors for road traffic injuries and mortalities in Ethiopia: Systematic review and meta-analysis. *Injury Prevention*, 27(4), 384-394.

- Dolan, S. L., García, S., Cabezas, C., & Tzafrir, S. S. (2008). Predictors of "quality of work" and "poor health" among primary health-care personnel in Catalonia: Evidence based on cross-sectional, retrospective and longitudinal design. *International Journal of Health Care Quality Assurance*, 21(2), 203-218.
- Faramarzi, S. (2011). Effectiveness of cognitive-behavioral life skills on the mental health of women with disabled husbands. *Quarterly Journal of Social Welfare*, 11, 217–234.
- Getachew, S. & Ali E. (2016). The burden of road traffic injuries in an emergency department in Addis Ababa. Unpublished manuscript.
- Hailemichael, F. (2015). Magnitude and outcomes of road traffic accidents at hospitals in Wolaita Zone, SNNPR, Ethiopia. Unpublished manuscript.
- Halvorsrud, R., Kvale, K., & Følstad, A. (2016).Improving service quality through customer journey analysis. *Journal of Service Theory and Practice*, 26, 840–867.
- Hildingh, C., & Fridlund, B. (2004). A 3-year follow-up of participation in peer support groups after a cardiac event. *European Journal of Cardiovascular Nursing*.
- Kopits, A. (2004). *Traffic fatalities and economic growth* (PhD thesis). University of Maryland.
- Lew, S. Q., & Patel, S. S. (2007). Psychosocial and quality of life issues in women with end-stage renal disease. *Advances in Chronic Kidney Disease*, 14(4), 363-369.
- Martín, L. A. Á., Sarmiento, P., & de Rodríguez, L. M. (2017). The evolution of coping and adaptation in hospitalized adults who have suffered traffic accident-related musculoskeletal trauma. *Enfermería Global*, 16(4), 242-255.
- Negesa, L., & Dessie, Y. (2017). Characterization of road traffic accidents on the road between Harar and Dire Dawa, Eastern Ethiopia: A cross-sectional study. *East African Journal of Health and Biomedical Sciences*, 1(2), 29-35.

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- Krueger, L., & Neuman, W. L. (2006). Social work research methods: Qualitative and quantitative approaches: With Research Navigator. Pearson.
- Persson, A. (2008). Road traffic accidents in Ethiopia: Magnitude, causes, and possible interventions. *Advances in Transportation Studies*, 15, 5-16.
- Pistulka, G. (2002). Acculturation stress, social support, and depression among the Korean American immigrant elderly in Maryland. *The 130th Annual Meeting of the American Public Health Association*.
- Rambod, M., & Rafii, F. (2010).Perceived social support and quality of life in Iranian hemodialysis patients. *Journal of Nursing Scholarship*, 42(3), 242-249.
- Tiruneh, B. T., Bifftu, B. B., & Dachew, B. A. (2019). Prevalence and factors associated with road traffic incidents among adolescents and children in the hospitals of Amhara National Regional State, Ethiopia. *BMC Emergency Medicine*, 19(1), 1-6.
- World Health Organization (2009) .Status report on road safety, Available from www.who.org
- World Health Organization.(2015). Status report on road safety.
- World Health Organization.(2018). Status report on road safety.
- Woyessa, A. H., Heyi, W. D., Ture, N. H., & Moti, B. K. (2021). Patterns of road traffic accident, nature of related injuries, and post-crash outcome determinants in western Ethiopia-a hospital based study. *African Journal of Emergency Medicine*, 11(1), 123-131.
  - https://www.sciencedirect.com/science/article/pii/S2211419X20301063