



Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh.

Submitted by

Mir Abdur Razzak

Student ID Number: 212-41-1344

Department of Public Health

Faculty of Health and Life Sciences

Daffodil International University

Supervised by

Dr. ABM Alauddin Chowdhury

Professor and Head

Department of Public Health

Daffodil International University

January, 2024

DECLARATION

By submitting this thesis entitled “**Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh.**”, I declare that the entirety of the work contained therein is my own, original work, and I am the sole author of it. It also declares that it has not been submitted elsewhere for any conferment.

Signature



.....

Mir Abdur Razzak

Student ID Number: 212-41-1344

Department of Public Health

Faculty of Health and Life Sciences

Daffodil International University

CERTIFICATION

This is to certify that Mir Abdur Razzak has completed her dissertation entitled Knowledge, Attitude, and Practice of **Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh**”, under my close supervision, for the partial completion of the criteria needed to be awarded the Master of Public Health (MPH) degree. As far as I am aware, no other university or institute has received the findings presented in this thesis for consideration for a degree or diploma.

Signature



Prof. Dr. ABM Alauddin Chowdhury
Head
Department of Public Health
Daffodil International University

ACKNOWLEDGEMENTS

I appreciate and laud Allah for providing this wonderful opportunity and allowing me to complete my thesis.

I'd like to convey my heartfelt thanks and obligation to my esteemed research supervisor, Dr. ABM Alauddin Chowdhury, Professor and Head, Department of Public Health, DIU, for his direct, constant, and unwavering supervision during the study. Without his help, submitting my dissertation would not have been possible. Who consistently encouraged me and provided important feedback during the proposal preparation process, as well as directed me through the correct collection and analysis of data.

I am deeply grateful to all of my teachers at Daffodil International University (DIU), including Prof. Dr. Md. Bellal Hossain, Dean, Faculty of Allied Health Sciences, Professor Dr. Md. Shahjahan, Professor Dr. Salamat Khandker, and Associate Prof. Dr. Nadira Mehriban, who have helped, guided, and inspired me outside of the classroom. I am really delighted to be a student of these distinguished experts.

I'd like to express my heartfelt gratitude to the study's field supervisor and field investigators for their efforts in completing the study on time, as well as the study's respondents for providing valuable information; without their repeated support and cooperation during the survey, the research work would not have been possible.

In the end but not foremost, I would want to express my gratitude to my family, who during this study period were deprived of my love and devotion, for their unwavering collaboration and inspiration.

Mir Abdur Razzak

ACRONYMS

BMRC	Bangladesh Medical Research Council
DIU	Daffodil International University
HSC	Higher Secondary School Certificate
MVA	Motor Vehicle Accident
RTA	Road Traffic Accident
SPSS	Statistical Package for Social Sciences
TV	Television
WHO	World Health Organization

TABLE OF CONTENTS

Contents	Page
Acknowledgements	v
Acronyms	vii
Abstract	xi
Chapter I : Introduction	1 - 7
1.1 Background	1
1.2 Justification of the study	3
1.3 Literature Review	4 - 5
1.4 Research Question	6
1.5 Objectives of the study	6
1.5.1 General objective	6
1.5.2 Specific objectives	6
1.6 Variables of the Study	6
Chapter II : Methodology	7 - 9
2.1 Study design and type	7
2.2 Study area	7
2.3 Study Population	7
2.4 Study period	7
2.5 Sampling Technique and Criteria	7
2.6 Study Population and Sample size	8
2.7 Data Collection Tool and Methods	8
2.8 Data Quality Control Measures	8
2.9 KAP Measures	9
2.10 Data Processing and Analysis	9
2.11 Ethical Considerations	9
2.12 Response Rate	9
Chapter III : Result and Analysis	10 - 19
Chapter IV: Discussion	20 – 21
Chapter V: Conclusion and Recommendations	22 – 23
5.1 Conclusion	22

5.2 Recommendations	23
References	24 – 26
Annexure – I: Informed Consent and Questionnaire - English	27 – 30
Annexure – III: Time Frame of the Study	31

LIST OF TABLES

Content	Page
Table 1: List of Variables	6
Table 2: Distribution of the respondents by their Socio-demographic Status	10
Table 3. Distribution of the respondents according to Motor Vehicle Accident exposure.	11
Table 4. Distribution of the respondents according to Knowledge of Road Traffic Rules.	12
Table 5. Distribution of the respondents according to Attitudes of Road Traffic Rules.	13
Table 6. Distribution of the respondents according to Practice of Road Traffic Rules.	14
Table 7. Association between the Level of Knowledge on Traffic Rules by other variables.	16
Table 8. Association between the Level of Attitudes on Traffic Rules by other variables.	17
Table 9. Association between the Level of Practice on Traffic Rules by other variables.	18

LIST OF TABLES

Content	Page
Figure 1: Distribution of the respondents according to the Level of Knowledge on Traffic Rules and Regulations.	13
Figure 2: Distribution of the respondents according to the Level of Attitude on Traffic Rules and Regulations.	14
Figure 3: Distribution of the respondents according to the Level of Practice on Traffic Rules and Regulations.	15

Abstract

Motor Vehicle Accident (MVA) is one of the key reasons of mortality and morbidity in Bangladesh, especially for Male population. Furthermore, there is a lack of research in the subject field on MVA patient's knowledge, attitude and practice regarding traffic rules and regulation, thus the study attempted to explore the level of knowledge, attitude and practice among male MVA patients. It was a cross-sectional descriptive study and data were collected by a semi-structured questionnaire through face to face interview from 384 male patients attending at National Institute of Traumatology & Orthopedic Rehabilitation (NITOR) in Bangladesh from October 2022 to April 2023. In the present study among respondents among 384 respondents 25.8% of them were in age groups of below 30, 31 to 40 (28.1%) and 41 to 50 (39.6%) however, 6.5% were above the age of 50 (Mean 37 +/- 1.08). Just half of the respondents (50.0%) were having primary education while 25.0% were completed Higher secondary and others (11.5%) completed graduation or more. Among the respondents most of them were with labor based profession, while 39.6% with labor based works, 37.2% with service and over 11% of each were students and businessmen. According to study findings study around 77% of the respondent's MVA reason were overtaking, while 11.4% were injured by MVA due to over-speeding and 11.5% due to road condition. Moreover 76.8% respondents had past MVA record at least once, 11.7% had twice and 11.5% were no past MVA record. Moreover, only 13% had strong knowledge and practice, while 26% had strong attitudes towards traffic rules and regulations. According to the study Knowledge Attitudes and Practices regarding Traffic Rules and Regulation found significantly associated with Age, Education, Monthly Family Income (BDT), Occupation, Living Area, Reason of MVA and Past experience of MVA.

CHAPTER I

Introduction

1.1 Background

Road traffic accidents include both fatal and non-fatal injuries incurred as a result of traffic collisions. An accident is defined as an incident involving at least one moving vehicle on a public road that may or may not result in injuries [1]. Each year, road traffic accidents cause more than 20 million injuries or impairments, as well as 1.17 million fatalities [2-4]. This means that 3,242 individuals die on average every day throughout the world. Aside from fatalities, it is estimated that 20 to 50 million people worldwide are injured or disabled each year.

Rather than ignorance, carelessness, inattention, and overconfidence are more often the causes of accidents. According to Robertson and experts from the US Department of Transportation's Road Safety Agency, there are several issues associated with traffic accidents that need to be addressed separately [5, 6]. Before, during, and after a collision, there are three parties involved: people, cars, and the environment. In impoverished countries, human error is thought to be the cause of 64–95% of car accidents [7]. Reports from developed countries indicate that one of the best ways to reduce the number of fatalities in road accidents is to use seat belts [8,9]. According to other study, using a seat belt during a car accident either totally prevents or reduces the severity of several injuries suffered by vehicle occupants [10-12]. Safety seat belts are death-prevention techniques because they maintain the body's natural position under restrained, which has been demonstrated to reduce front-seat passenger injury risks by 50% and 45%, respectively. The seat belt helps the driver maintain control of the automobile by keeping the passenger in place during a collision. When individuals collide, it is common for automobile occupants to have significant injuries [13]. Not wearing a seat belt increases the risk of being thrown from the car, through the door or windshield, into trees, telephone poles, or rocks, or struck by a car, either their own or someone else's. Using a portable cell phone while driving is another element that contributes to traffic accidents. An increasing body

of research indicates that using a portable mobile phone while operating a vehicle raises the risk of an accident [14-16].

1.2. Justification of the Study

Transportation-related injuries have become a global concern. According to the World Health Organization's 2015 global report on road traffic safety, 20-50 million people experience non-fatal injuries that cause some kind of lifetime disability, compared to 1.25 million deaths. Automobile accidents are the leading cause of death among persons aged 15 to 29 [17]. Over three years (2011-2013), population increased by 4% and motorization increased by 16%, but death rates remained constant [18]. Low and middle-income countries account for three-fifths of all road traffic accidents and injuries worldwide [19]. Every hour in 2014, 52 events occurred on Indian highways, resulting in 16 deaths [20]. 4,50,898 traffic events occurred nationwide, with 4,77,731 injuries and 1,41,526 fatalities as a result. Road traffic cases increased from 4, 43,001 in 2013 to 4, 50,898 in 2014, a 1.8% increase. In India, the number of people purchasing personal vehicles is still rising [21]. In ten years, the population of India increased by 17.64%, but the number of registered cars increased by 132%. The weight of road traffic accidents falls on the nation, the globe, and most significantly, the families of the victims. Road traffic accidents cause 60% of Disability Adjusted Life Years (DALYs) among young people aged 15 to 44 [22]. 73% of them are males who are the breadwinners or productive members of their families. As a result, the afflicted families live in poverty [23]. Trauma has a massive global financial cost. The World Health Organization estimates that the global cost of trauma is \$518 billion, with the United States accounting for \$408 billion [24-26]. In India, road accidents cost the economy between one and three percent of its GDP. India must invest 20 billion per year on road traffic safety [26].

A driving behavior that puts the driver's safety in danger and breaches the law is known as unsafe driving conduct [27]. Lack of acquaintance with safe behaviors (knowledge), a lack of conviction in the significance of safe action (attitude), and a lack of comprehension of how safe actions are carried out (performance) are the main factors contributing to a driver's unsafe behavior. A number of earlier studies revealed that Iranian drivers,

especially those who operated taxis, lacked appropriate expertise and had less positive attitudes about driving [28, 29]. Individual differences in driving personality factors, risk perception, knowledge, and attitude toward traffic safety all affect safety [30].

1.3 Literature Review

Traffic accidents are a major problem for public health in many parts of the world. Every year, almost 27.1 million people are killed in road accidents, with another 50 million injured [31]. The World Health Organization (WHO) anticipates that mortality from vehicle accidents may increase by up to 67% by 2020 if considerable action is not taken to reduce them [32]. Furthermore, it is expected that by 2020, traffic accidents would rank third in high-income countries and second in low- and middle-income countries [33]. Road accidents are Iran's most common cause of injury, the main cause of years lost due to early death, and the cause of around 32 events per 100,000 people annually [34, 35]. They are also the country's second highest cause of mortality. The primary cause of road accidents is human error [36, 37]. 80–90% of accidents, according to Holbert, are caused by human causes [38]. Various factors contribute to road accidents in Iran: 65% are caused by human error, 15% by technical breakdown of the vehicle, 13% by obstacles encountered on the road, and 7% by weather conditions [39, 40].

According to research, one may forecast risk-takers by boosting drivers' knowledge and altering the attitudes of those who change their conduct, because an individual's personality is fixed but their attitude is variable [41]. Understanding driving rules is the most critical tool for maintaining driver safety, thus it stands to reason that having a high level of legal awareness will result in fewer driving violations. Driving abuse is common among drivers. Furthermore, there is a low level of understanding regarding driving and driving rules.

Driving infractions are significantly reduced when one is aware of the guiding regulations. Stated differently, a greater understanding of driving guidelines legislation results in fewer driving infractions [42]. In society, traffic rules are seen as a kind of governmental norm that are primarily intended to preserve comfort, welfare, and order. However, the lawmaker

has put in place corrective measures to prevent future violations of these laws. But the police, the regulating body, are powerless to deal with traffic infractions on their own. This is mostly due to the fact that it ignores time and money considerations. Secondly, the ratio of police officers to residents is lower than what is required to keep the peace in every area. As a result, the police must embrace less expensive and more successful tactics that draw on cultural and community resources. While functioning as a source of internal social monitoring and control, the fine was also permanently and continuously enforced by the community and individual consciences.

It is possible to assume that taxi drivers in Shiraz had a medium level of knowledge and attitude based on the minimum and highest scores. The results of Redhwan and Karim in Malaysia [43], al-Dahrani et al. in Saudi Arabia [44], and Shams et al. in Tehran [45] were all in agreement with this conclusion. It did not, however, agree with the results of Bachani et al. in Kambia [47] and Riaz and Shahid [46]. The sample size, the statistical procedure, and the kinds of surveys used are the reasons behind this discrepancy.

The computational findings of the study revealed a significant relationship between driver age and knowledge score, with older drivers scoring lower on average. One of the causes of this problem is that drivers do not receive adequate attention or are not kept safe. Another option is that driver's license testing is not conducted on a regular basis. The statistics show that there was no significant correlation between knowledge score and other demographic characteristics. This finding contradicts those of Jelalian et al. [48]. Jelalian et al. found a significant association between average knowledge scores, marital status, and education [48].

The results of a study showed that the driver's perspective of driving as a job, with a mean attitude score, was not significantly correlated with age, the number of years of driving experience, average driving time, accident history, education, or marital status. These results were consistent with those obtained in Iran by Tajvar et al. [49]. Drivers' opinions and their ages and jobs were shown to be significantly correlated by Moradi et al. [49]. The kind of statistical community that was utilized in the study may be the reason for this

discrepancy. As in the research of motorcycle riders, taxi drivers also surveyed the statistical population in this investigation [49].

Almost 85% of fatalities and almost 90% of disability from traffic accidents happen in underdeveloped countries [50]. Moreover, motorization is increasing at a rate that exceeds the progress of transportation infrastructure development. This fact is the primary reason for the growing numbers and rates of motor vehicle injuries in emerging nations, according to Jacob et al. (2000) [51]. Other factors that contribute to higher accident rates in less developed countries include the prevalence of antiquated automobiles, which often carry many more passengers than they are designed to, the lack of safety belts, poor road design and maintenance, and the makeup of traffic on roads [52].

1.4 Research Question/Hypothesis:

What is the Level of Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh?

1.5 Objectives:

1.5.1 General Objective:

To find out the Level of Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh.

1.5.2 Specific Objectives:

- To assess socio demographic status of the participants.
- To explore the level of Knowledge of Traffic rules and regulations among MVA patients.
- To find the level of Attitude of Traffic rules and regulations among MVA patients.
- To evaluate the level of Practice of Traffic rules and regulations among MVA patients.

1.6 Variables in the study

In this research there are mainly two types of variable one is dependent variable and another one is independent variable. They are given below

Table 1: List of Variables, considered to prepare data collection instruments

Independent variable	Dependent variable
Age, Gender, Income, Education, length of work experience	Knowledge, Attitude, and Practice of Traffic rules and regulations, Motor Vehicle Accident (MVA) management related behaviors.

CHAPTER II

Methodology

2.1 Study Design and Type

This study used a descriptive approach and was cross-sectional in nature.

2.2 Study area

National Institute of Traumatology & Orthopedic Rehabilitation (NITOR) in Bangladesh served as the research site for this study.

2.3 Study population

The male Motor Vehicle Accident (MVA) patients of Bangladesh's National Institute of Traumatology & Orthopedic Rehabilitation (NITOR) served as the research population.

2.4 Study Period

This research was conducted over the course of six months, from October 2022 to April 2023.

2.5 Sampling Technique and Criteria

The study technique employed the purposive sampling method. This helped to swiftly and effectively gather data from the intended sample. Additionally, the strategy will help researchers reduce study risks and data gathering biases throughout the research process.

The inclusion criteria for this research are-

- a. Motor Vehicle Accident Patients
- b. Only Male
- c. Only patients attending the study area

Exclusion criteria for the research are

- a. Any other types of patients
- b. Had mental illness
- c. Patients from other hospitals

2.6 Study population and Sample size

There were 384 students in the sample. All responders were male. For a population, a single percentage formula was used to calculate the sample size.

$$n = \left(\frac{Z}{2}\right)^2 \frac{P(1-P)}{W^2}$$

n = preferred sample size, when the study population <10000

Z is the standard normal distribution set as 1.96, which corresponds to an 95% confidence interval.

P = Proportion in the target population estimated

1-P = proportion in the target population

w = degree of accuracy required (set at 0.05 a marginal error)

Based on this

$$n = (1.96)^2 \times (0.5) \times (0.5) / 0.05^2 = 384$$

Sample Size was estimated 384.

2.8 Data collection Tool and Methods

Items pertaining to socio-demography, Knowledge, Attitude, and Practice of Traffic rules and regulations, Motor Vehicle Accident (MVA) management related behaviors were included in a semi-structured questionnaire. Depending on the participants' desire, in-person interviews and self-administration were used to gather data. Before the interview, each participant provided written informed permission.

2.9 Data Quality Control Measures

Peer review and the supervisor overseen the quality of the study. Throughout the course of this investigation, there was no conflict of interest. The findings of other researchers working on a related issue corroborated the research data.

2.3 Knowledge, Attitude and Practice Measures

The questions were scored and categorized as follow:

For Knowledge, the following scoring system was followed: 1=very weak, 2=weak, 3=strong, 4=very strong. The entire knowledge factors added and ranged from 6-24 points.

For the attitude, the following scoring system was followed: 1=very weak, 2=weak, 3=strong, 4=very strong. The entire attitude factors added and ranged from 6-24 points.

for practice, always=4, usually=3, sometimes=2 never=1. The practice factor was added and the range of the scores was between 6-24 points. Highest points indicated highest practice.

The cut-off point of knowledge, attitude and practice was 12.

2.10 Data processing and analysis

The research data were evaluated using SPSS and Microsoft Excel software. The raw data will be saved electronically and processed using the previously specified software. Following that, the data will be presented in the study report using graphs and tables.

2.11 Ethical Considerations

The Daffodil International University Faculty of Allied Health Sciences' Ethical Review Committee (ERC) provided ethical approval. All research participants were informed of the study's main purpose and data privacy policy. Each participant provided written consent. The confidentiality of the information obtained from responders was strictly safeguarded.

2.12: Response Rate

The present study had a 100% response rate because of the use of purposive random sampling.

CHAPTER III

Results

In the current study, 384 male MVA patients participated to find out their level of Knowledge, Attitudes and Practice regarding Traffic Rules and Regulation. Among the participants 25.8% of them were in age groups of below 30, 31 to 40 (28.1%) and 41 to 50 (39.6%) however, 6.5% were above the age of 50 (Mean 37 +/- 1.08). Just half of the respondents (50.0%) were having primary education while 25.0% were completed Higher secondary and others (11.5%) completed graduation or more (Table 2).

Table 2. Distribution of Socio-demographic data.

Variable Name	Variable Group	Frequency n = 384	Valid Percent (%)
Age (Mean=37 SD: 1.08)	Below 30	99	25.8
	31 to 40	108	28.1
	41 to 50	152	39.6
	51 and above	25	6.5
Education	Primary	192	50.0
	Secondary	52	13.5
	Higher Secondary	96	25.0
	Bachelor or More	44	11.5
Monthly family income (BDT) (Mean=97 BDT SD: 6.90)	<60 thousand	197	51.3
	61-80 thousand	44	11.5
	81-100 thousand	0	0
	Above 100 thousand	143	37.2
Occupation	Service	143	37.2
	Business	45	11.7
	Labor based work	152	39.6
	Student	44	11.5
Type of Living Area	Urban	295	76.8
	Rural	89	23.2

More than half (51.3%) of the respondent's monthly family income were less than 60 thousand taka (BDT), over one third of the respondent's family income were over 100 thousand takas (37.2%). Among the respondents most of them were with labor based

profession, while 39.6% with labor based works, 37.2% with service and over 11% of each were students and businessmen.

Table 3. Distribution of the respondents according to Motor Vehicle Accident exposure.

Variable Name	Variable Group	Frequency n = 384	Valid Percent (%)
Reasons for motor vehicle accidents (MVA) among study	Over speeding	44	11.4
	Overtaking	296	77.1
	Bad roads	44	11.5
Previous exposure to MVA	None	44	11.5
	Once	295	76.8
	Twice	45	11.7

Around 77% of the respondent's MVA reason were overtaking, while 11.4% were injured by MVA due to over-speeding and 11.5% due to road condition.

Moreover 76.8% respondents had past MVA record at least once, 11.7% had twice and 11.5% were no past MVA record.

Table 4. Distribution of the respondents according to Knowledge of Road Traffic Rules.

Variable Name	Variable Group	Frequency n = 384	Valid Percent (%)
Legal Age to acquire a driving license	<16 years	0	0
	16 to 18 years	88	22.9
	>18 years	296	77.1
Compulsory use of seat belt	Yes	284	73.9
	No	20	5.2
	Don't Know	80	20.8
Compulsory use of helmet	Yes	300	78.1
	No	24	6.25
	Don't Know	60	15.6
Ideal side to overtake	Right	284	73.9
	Left	100	26.0
Ideal side to walk on the road	Right	282	73.4
	Left	102	26.5
Prime importance to pedestrian	Agree	244	63.5
	Disagree	140	36.4
Reasons for road traffic accidents (RTA)	High speed alone	180	46.9
	Driver's lack of awareness of traffic rules and regulations alone	94	24.5
	Lack of strictness to implement Road traffic rules and regulations alone	77	20.0
	All of the above reasons	33	8.5
According to you, how much do you have knowledge of Traffic Rules and Regulations?	High	10	2.6
	Moderate	170	44.3
	Low	204	53.1

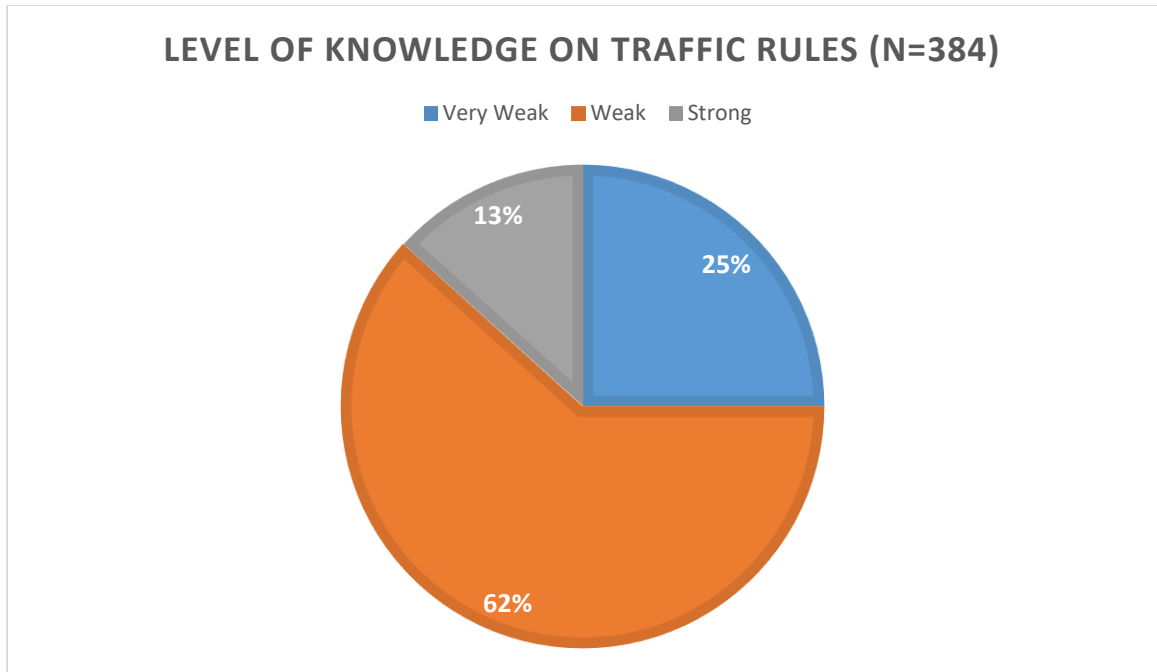


Figure 1: Distribution of the respondents according to the Level of Knowledge on Traffic Rules and Regulations.

According to the study findings, 62% of the respondents had weak knowledge while 25% had very weak knowledge and only 13% were had strong knowledge about traffic rules and regulation.

Table 5. Distribution of the respondents according to Attitudes of Road Traffic Rules.

Variable Name	Variable Group	Frequency n = 384	Valid Percent (%)
Driving before acquiring a license is all right	Yes	24	6.3
	No	360	93.7
Road signs and symbols help in reducing accidents	Yes	227	59.1
	No	157	40.9
Pillion or back seat rider must use helmet/seat belt	Yes	233	60.7
	No	151	39.3
Use of mobile phones while riding/driving	Agree	126	32.8
	Disagree	368	68.2

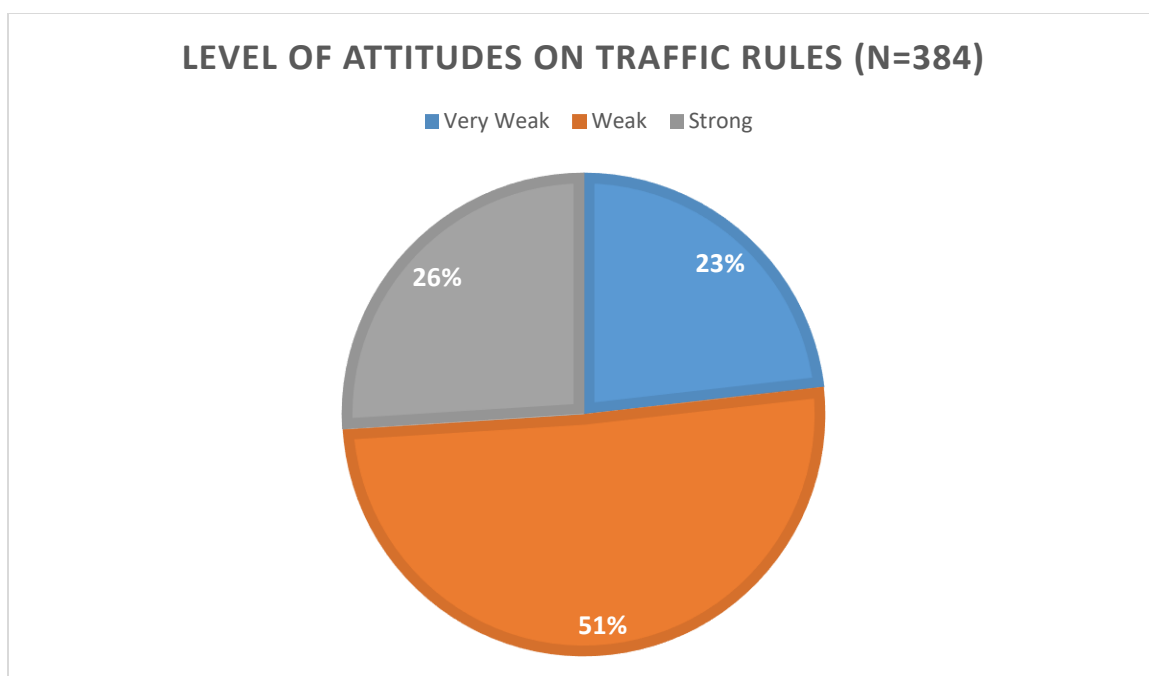


Figure 2: Distribution of the respondents according to the Level of Attitude on Traffic Rules and Regulations.

According to the study findings, 51% of the respondents had weak attitude while 23% had very weak attitude and only 26% were had strong attitude about traffic rules and regulation.

Table 6. Distribution of the respondents according to Practice of Road Traffic Rules.

Variable Name	Variable Group	Frequency n = 384	Valid Percent (%)
You or your driver use a Seat belt during car driving	In the city	24	6.3
	On highway	45	11.7
	Both	310	80.7
	None	5	1.3
You or your driver use a Helmet during motorcycle driving	In the city	1	0.3
	On highway	3	0.7
	Both	375	97.6
	None	0	0
You or your driver have a valid driving license	Yes	361	94.0
	No	23	6.0
If you drive or your car/bus driver keeps speeding inside any city area	Less than 40 kmph	59	15.3
	40 to 60 kmph	242	63.0
	Over 60 kmph	83	21.6

If you drive or your car/bus driver keeps speeding inside any highway	Less than 40 kmph	19	4.9
	40 to 60 kmph	281	73.2
	Over 60 kmph	84	21.9

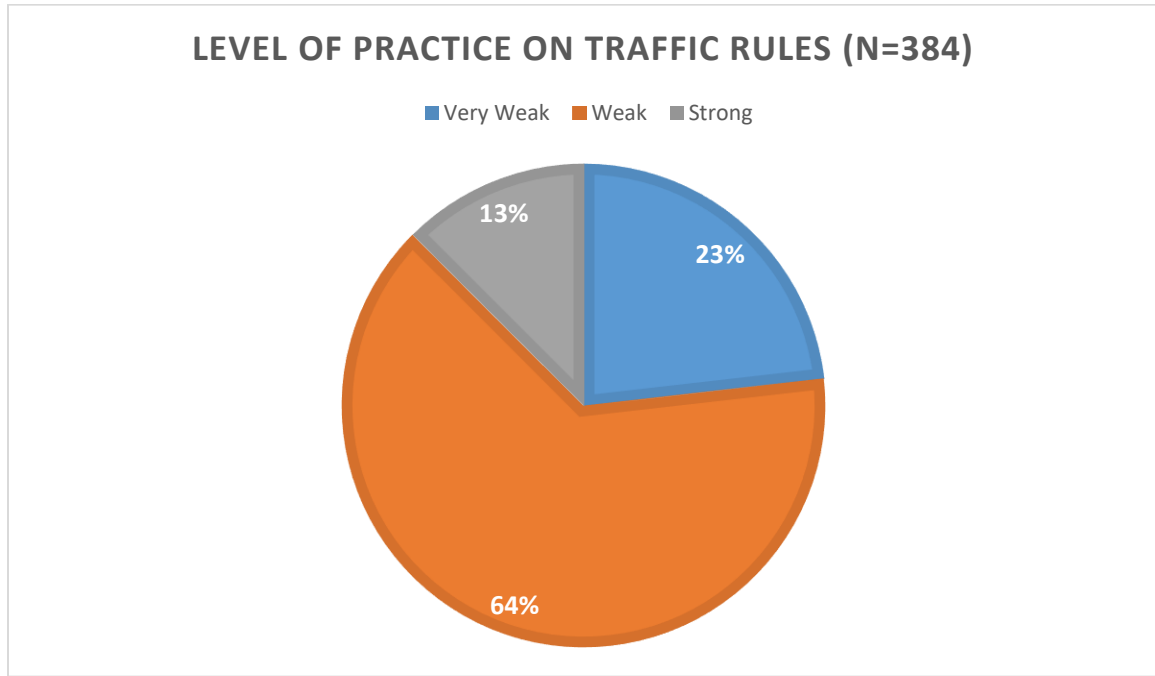


Figure 3: Distribution of the respondents according to the Level of Practice on Traffic Rules and Regulations.

According to the study findings, 64% of the respondents had weak practice while 23% had very weak practice and only 13% were had strong practice about traffic rules and regulation.

Frequency distribution and association among variables

The following cross-table shows the association between different selected variables and Level of Knowledge, Attitude and Practice on Traffic rules and regulation. The chi-squared test is used to determine whether a specific variable is significantly associated with Level of Knowledge on Traffic Rules and Regulation.

Table 7. Association between the Level of Knowledge on Traffic Rules by other variables.

Variables	Level of Knowledge on Traffic Rules			Total n=384	Percentage (%)	P- value
	Very Weak n = 96 (78%)	Weak n = 237 (78%)	Strong n = 51 (22%)			
Age						0.000
Below 30	25	48	26	99	25.8	
31 to 40	0	108	0	108	28.1	
41 to 50	71	81	0	152	39.6	
51 and above	0	0	25	25	6.5	
Education						0.000
Primary	44	148	0	192	50.0	
Secondary	52	0	0	52	13.5	
Higher Secondary	0	45	51	96	25.0	
Bachelor or More	0	44	0	44	11.5	
Family Monthly Income (BDT)						0.000
<60 thousand	96	101	0	197	51.3	
61-80 thousand	0	44	0	44	11.5	
81-100 thousand	0	0	0	0	0	
Above 100 thousand	0	92	51	143	37.2	
Occupation						0.000
Service	0	92	51	143	37.2	
Business	0	45	0	45	11.7	
Labor based work	52	100	0	152	39.6	
Student	44	0	0	44	11.5	
Living Area						0.038
Urban	96	148	51	295	76.8	
Rural	0	89	0	89	23.2	
Reasons for motor vehicle accidents (MVA) among study						0.000
Over speeding	44	0	0	44	11.4	
Overtaking	52	193	51	296	77.1	
Bad roads	0	44	0	44	11.5	
Previous exposure to MVA						0.000
None	44	0	0	44	11.5	
Once	52	192	51	295	76.8	
Twice	0	45	0	45	11.7	

According to the table 6, the level of Knowledge on traffic rules and regulation is found significantly associated with Age ($P < 0.000$), Education ($P < 0.000$), Monthly Family Income (BDT) ($P < 0.000$), Occupation ($p < 0.000$), Living Area ($P < 0.038$), Reason of MVA ($P < 0.000$) and Past experience of MVA ($P < 0.000$).

Table 8. Association between the Level of Attitude on Traffic Rules by other variables.

Variables	Level of Attitude on Traffic Rules			Total n=384	Percentage (%)	P- value
	Very Weak n = 96 (78%)	Weak n = 237 (78%)	Strong n = 51 (22%)			
Age						0.000
Below 30	25	48	26	99	25.8	
31 to 40	0	108	0	108	28.1	
41 to 50	71	81	0	152	39.6	
51 and above	0	0	25	25	6.5	
Education						0.001
Primary	44	100	48	192	50.0	
Secondary	0	0	52	52	13.5	
Higher Secondary	45	51	0	96	25.0	
Bachelor or More	0	44	0	44	11.5	
Family Monthly Income (BDT)						0.000
<60 thousand	96	101	0	197	51.3	
61-80 thousand	0	44	0	44	11.5	
81-100 thousand	0	0	0	0	0	
Above 100 thousand	0	92	51	143	37.2	
Occupation						0.004
Service	0	95	48	143	37.2	
Business	45	0	0	45	11.7	
Labor based work	44	56	52	152	39.6	
Student	0	44	0	44	11.5	
Living Area						0.000
Urban	0	195	100	295	76.8	
Rural	89	0	0	89	23.2	
Reasons for motor vehicle accidents (MVA) among study						0.000
Over speeding	0	44	0	44	11.4	
Overtaking	89	107	100	296	77.1	
Bad roads	0	44	0	44	11.5	
Previous exposure to MVA						0.000
None	0	44	0	44	11.5	

Once	44	151	100	295	76.8	
Twice	45	0	0	45	11.7	

According to the table 7, the level of attitude on traffic rules and regulation is found significantly associated with Age ($P < 0.000$), Education ($P = 0.001$), Monthly Family Income (BDT) ($P < 0.000$), Occupation ($p = 0.004$), Living Area ($P < 0.038$), Reason of MVA ($P < 0.000$) and Past experience of MVA ($P < 0.000$).

Table 9. Association between the Level of Practice on Traffic Rules by other variables.

Variables	Level of Practice on Traffic Rules			Total n=384	Percentage (%)	P-value
	Very Weak n = 96 (78%)	Weak n = 237 (78%)	Strong n = 51 (22%)			
Age						
Below 30	19	51	29	99	25.8	0.018
31 to 40	44	45	19	108	28.1	
41 to 50	26	126	0	152	39.6	
51 and above	0	25	0	25	6.5	
Education						
Primary	44	100	48	192	50.0	0.001
Secondary	0	52	0	52	13.5	
Higher Secondary	45	51	0	96	25.0	
Bachelor or More	0	44	0	44	11.5	
Family Monthly Income (BDT)						
<60 thousand	45	152	0	197	51.3	0.000
61-80 thousand	44	0	0	44	11.5	
81-100 thousand	0	0	0	0	0	
Above 100 thousand	0	95	48	143	37.2	
Occupation						
Service	0	95	48	143	37.2	0.000
Business	45	0	0	45	11.7	
Labor based work	44	108	0	152	39.6	
Student	0	44	0	44	11.5	
Living Area						
Urban	0	247	48	295	76.8	0.000
Rural	89	0	0	89	23.2	
Reasons for motor vehicle accidents (MVA) among study						0.000

Over speeding	0	44	0	44	11.4	
Overtaking	89	159	48	296	77.1	
Bad roads	0	44	0	44	11.5	
Previous exposure to MVA						0.000
None	0	44	0	44	11.5	
Once	44	203	48	295	76.8	
Twice	45	0	0	45	11.7	

According to the table 8, the level of Knowledge on traffic rules and regulation is found significantly associated with Age ($P = 0.018$), Education ($P < 0.001$), Monthly Family Income (BDT) ($P < 0.000$), Occupation ($p < 0.000$), Living Area ($P < 0.038$), Reason of MVA ($P < 0.000$) and Past experience of MVA ($P < 0.000$).

CHAPTER III

Discussion

Each year, road traffic accidents cause more than 20 million injuries or impairments, as well as 1.17 million fatalities [2-4]. This means that 3,242 individuals die on average every day throughout the world. Aside from fatalities, it is estimated that 20 to 50 million people worldwide are injured or disabled each year. Reports from developed countries indicate that one of the best ways to reduce the number of fatalities in road accidents is to use seat belts [8,9]. According to other study, using a seat belt during a car accident either totally prevents or reduces the severity of several injuries suffered by vehicle occupants [10-12].

Road traffic accidents cause 60% of Disability Adjusted Life Years (DALYs) among young people aged 15 to 44 [22]. 73% of them are males who are the breadwinners or productive members of their families. As a result, the afflicted families live in poverty [23]. In the current study, 384 male MVA patients participated to find out their level of Knowledge, Attitudes and Practice regarding Traffic Rules and Regulation. Among the participants 25.8% of them were in age groups of below 30, 31 to 40 (28.1%) and 41 to 50 (39.6%) however, 6.5% were above the age of 50 (Mean 37 +/- 1.08). Just half of the respondents (50.0%) were having primary education while 25.0% were completed Higher secondary and others (11.5%) completed graduation or more. More than half (51.3%) of the respondent's monthly family income were less than 60 thousand taka (BDT), over one third of the respondent's family income were over 100 thousand takas (37.2%). Among the respondents most of them were with labor based profession, while 39.6% with labor based works, 37.2% with service and over 11% of each were students and businessmen.

The computational findings of the study revealed a significant relationship between driver age and knowledge score, with older drivers scoring lower on average. One of the causes of this problem is that drivers do not receive adequate attention or are not kept safe. Another option is that driver's license testing is not conducted on a regular basis. The statistics show that there was no significant correlation between knowledge score and other demographic characteristics. This finding contradicts those of Jelalian et al. [48]. Jelalian et al. found a significant association between average knowledge scores, marital status, and education

[48]. 80–90% of accidents, according to Holbert, are caused by human causes [38]. Various factors contribute to road accidents in Iran: 65% are caused by human error, 15% by technical breakdown of the vehicle, 13% by obstacles encountered on the road, and 7% by weather conditions [39, 40]. While in the current study around 77% of the respondent's MVA reason were overtaking, while 11.4% were injured by MVA due to over-speeding and 11.5% due to road condition. Moreover 76.8% respondents had past MVA record at least once, 11.7% had twice and 11.5% were no past MVA record.

According to the study findings, only 13% had strong knowledge and practice, while 26% had strong attitudes towards traffic rules and regulations. According to the study Knowledge Attitudes and Practices regarding Traffic Rules and Regulation found significantly associated with Age, Education, Monthly Family Income (BDT), Occupation, Living Area, Reason of MVA and Past experience of MVA. Similarly, the results of another study showed that the driver's perspective of driving as a job, with a mean attitude score, was not significantly correlated with age, the number of years of driving experience, average driving time, accident history, education, or marital status. These results were consistent with those obtained in Iran by Tajvar et al. [49]. Drivers' opinions and their ages and jobs were shown to be significantly correlated by Moradi et al. [49].

CHAPTER IV

Conclusion and Recommendation

4.1 Conclusion

The majority of respondents, male MVA patients had weak knowledge, attitudes and Practice of traffic rules and Regulation, whereas only 13% had strong knowledge and practice with 26% strong attitudes. Which reflects the urgency of building awareness on Traffic rules and regulation among both drivers as well as general people. To address the challenges surrounding MVA, further research and policy level integration is needed.

4.2 Recommendation

The most significant role in MVA prevention is to application and implementation of Traffic Rules and Regulation. The results of this study caution that in order to reduce MVA related mortality and morbidity, people and drivers should be aware about Traffic Rules. The findings of this research can be a starting point for further advance studies related to MVA.

References

1. World Health Organization. Report on injuries and violence prevention: Road traffic injuries. 2002; World Health Organization, Geneva.
2. Peden MM, Krug E, Mohan D, et al. A five year WHO strategy for road traffic injury prevention. 2001; World Health Organization, Geneva.
3. Binder S, Runge JW. Road Safety and Public Health: A US perspective and the global change. *Traffic Injury Prev* 2002; 7:3-9
4. Murray C, Lopez A. The global burden of disease. Harvard University Press, Cambridge, 1996.
5. Robertson LS. Injury epidemiology. Oxford University Press, London, 1992.
6. Johnston I. Action to reduce road casualties. *World Health Forum* 1992; 13:154-62
7. Transport Research Laboratory. TRL Report 445, 1990.
8. Green RN. Fatal injuries to restrained passenger car occupants in Canada: crash modes and kinematics of injury. *Accid Anal Prev* 1994; 26:207-14
9. Evans L. Safety-belt effectiveness: The influence of crash severity and selective recruitment. *Accid Anal Prev* 1996; 28:423-33
10. Arajaevi, E. Retrospective analysis of chest injuries in 280 seat belt wearers. *Accid Anal Prev* 1988; 20:251-9
11. Campbell BJ. Change in injuries associated with safety belt laws. *Accid Anal Prev* 1991; 23:87-93
12. Shibata A, Fukuda K. Risk factors of fatality in motor vehicle traffic accidents. *Accid Anal Prev* 1994; 26:391-7
13. Buseck V, Geller ES. The Vehicle Safety Reminder: Can Refinements Increase Safety Belt Use? Technical Report for General Motors Research Laboratories, 1984.
14. Lamble D, Kauranen T, Laakso M, Summala H. Cognitive load and detection thresholds in car following situations: safety implications for using mobile (cellular) telephones while driving. *Accid Anal Prev* 1999; 31:617-23
15. Violanti JM. Cellular phones and traffic accidents. *Public Health* 1997; 111:423-8
16. Violanti JM. Cellular phones and fatal traffic collisions. *Accid Anal Prev* 1998; 30:519-24
17. Park K. Accidents and Injuries. In: Park K, editor. *Park's Textbook of Preventive and Social Medicine*. 22th ed. Jabalpur, India: M/S Banarsidas Bhanot Publishers; 2013. pp. 374–378.
18. Mohan D, Tiwari G, Khayesi N, Nafukho FM. Road Traffic Injury Prevention: training manual, Geneva 2006
19. WHO. Global status report on road safety.
20. National Crime Report Bureau. Road traffic accidents report 2013
21. National Crime Report Bureau. Road traffic accidents report 2013
22. Deshpande P. Road safety and accidents prevention in India. *International Journal of Advanced Engineering Technology* 2014; 5(11):64-8.
23. Ministry of Road Transport and Highways. Government of India. Transport research wing New Delhi. 2013.
24. Paniker J, Graham SM, Harrison JW. Global trauma: the great divide. *SICOT J*. 2015; 1(19):1-6.
25. Parsekar SS et al. Road safety in India: a public health concern, *Indian Journal of Community Health* 2015; 27(2) 191.

26. Jogdand SK, Yerpude NP, Jogdand SM. Awareness and behavioral pattern with regard to road safety in south India. *Int J Biol Med Res.* 2013; 4(4): 3590-3592.
27. P. Ulleberg and T. Rundmo, "Personality, attitudes and risk perception as predictors of risky driving behaviour among young drivers," *Safety Science*, vol. 41, no. 5, pp. 427–443, 2003.
28. Tajvar, M. S. Yekaninejad, T. Aghamolaei, S. Hamed Shahraki, A. Madani, and L. Omid, "Knowledge, attitudes, and practice of drivers towards traf c regulations in BandarAbbas, Iran," *Electronic Physician*, vol. 7, no. 8, pp. 1566–1574, 2015.
29. M. Yunesian, A. Mesdaghinia, A. Moradi, and J. H. Vash, "Drivers' knowledge, attitudes, and behavior: a cross-sectional study," *Psychological Reports*, vol. 102, no. 2, pp. 411–417, 2008.
30. M. Naghavi, S. Shahraz, K. Bhalla et al., "Adverse health outcomes of road traf c injuries in Iran after rapid motorization," *Archives of Iranian Medicine*, vol. 12, 2009
31. T. Rakhshani, F. Rakhshani, Z. S. Asadi, M. Hadiabasi, K. Khorramdel, and M. Zarenezhad, "Study of the pattern of mortality caused by traf c accidents (tas) in the South of Iran," *Journal of Pakistan Medical Association*, vol. 66, no. 6, pp. 644–649, 2016.
32. H. Soori, M. Royanian, A. R. Zali, and A. Movahedinejad, "Road traf c injuries in Iran: the role of interventions implemented by traf c police," *Traf c Injury Prevention*, vol. 10, no. 4, pp. 375–378, 2009.
33. L. Taravatmanesh, S. M. Mortazavi, M. R. Baneshi, M. Shirbeygi Poor, A. Saeedifar, and F. Zolala, "Epidemiology of road traf c accidents in Rafsanjan city, Iran," *Electronic Physician*, vol. 10, no. 5, pp. 6859–6863, 2018.
34. Bahadorimonfared, H. Soori, Y. Mehrabi et al., "Trends of fatal road traf c injuries in Iran (2004–2011)," *PLoS One*, vol. 8, no. 5, Article ID e65198, 2013.
35. M. Zargar, A. Khaji, M. Karbakhsh, and M. R. Zarei, "Epidemiology study of facial injuries during a 13 month of trauma registry in Tehran," *Indian Journal of Medical Science*, vol. 58, 2004.
36. H. R. Hatamabadi, R. Vafaei, M. Haddadi, A. Abdolvand, and H. Soori, "Necessity of an integrated road traf c injuries surveillance system: a community-based study," *Traf c Injury Prevention*, vol. 12, no. 4, pp. 358–362, 2011.
37. L. Mallia, L. Lazuras, C. Violani, and F. Lucidi, "Crash risk and aberrant driving behaviors among bus drivers: the role of personality and attitudes towards traf c safety," *Accident Analysis & Prevention*, vol. 79, pp. 145–151, 2015.
38. S. Hulbert, "Effects of driver fatigue," *Human Factors in Highway Traf c Safety Research*, Wiley-Interscience, New York, NY, USA, 1972.
39. S. Saadat and H. Soori, "Epidemiology of traf c injuries and motor vehicles utilization in the capital of Iran: a population based study," *BMC Public Health*, vol. 11, pp. 488–496, 2011.
40. S. S. Tavafan, T. Aghamolaei, D. Gregory, and A. Madani, "Prediction of seat belt use among Iranian automobile drivers: application of the theory of planned behavior and the health belief model," *Traf c Injury Prevention*, vol. 12, no. 1, pp. 48–53, 2011.
41. H. Iversen, T. Rundmo, and H. Klempe, "Risk attitudes and behavior among Norwegian adolescents: the effects of a behavior modification program and a traf c safety campaign," *European Psychologist*, vol. 10, no. 1, pp. 25–38, 2005.

42. V. Yılmaz and H. Çelik, "Risky driving attitudes and self-reported traffic violations among Turkish drivers: the case of Eskisehir," *Dogus University Magazine*, vol. 7, 2006.
43. S. Ansari, F. Akhdar, M. Mandoorah, and K. Moutaery, "Causes and effects of road traffic accidents in Saudi Arabia," *Public Health*, vol. 114, no. 1, pp. 37–39, 2000.
44. Y. M. Al-Khaldi, "Attitude and practice towards road traffic regulations among students of health sciences college in Aseer region," *Journal of Family & Community Medicine*, vol. 13, no. 3, pp. 109–113, 2006.
45. Tajvar, E. Hadavandi, L. Omid, and A. Ghanbari, "Mining relationships among knowledge, attitude, and practice of drivers using self-organizing map and decision tree: the case of Bandar Abbas city taxi drivers," *Archives of Trauma Research*, vol. 7, no. 2, pp. 73–79, 2018.
46. A. Redhwan and A. J. Karim, "Knowledge, attitude and practice towards road traffic regulations among university students, Malaysia," *IIUM Medical Journal Malaysia*, vol. 9, no. 2, 2010.
47. S. H. N. Zaidi, P. C. Paul, P. Mishra, and A. Srivastav, "Risk perception and practice towards road traffic safety among medical students," *International Journal of Community Medicine and Public Health (Gujarat)*, vol. 4, pp. 9–14, 2016.
48. M. Shams, D. Shojaeizadeh, R. Majdzadeh, A. Rashidian, and A. Montazeri, "Taxi drivers' views on risky driving behavior in Tehran: a qualitative study using a social marketing approach," *Accident Analysis & Prevention*, vol. 43, no. 3, pp. 646–651, 2011.
49. Riaz and S. Shahid, "Knowledge, attitudes, and practice of drivers towards traffic rules and regulations in Multan, Pakistan," in *Proceedings of the 7th International RAIS Conference on Social Sciences*, Tampa, FL, USA, 2018.
50. Bachani, C. Risko, C. Gnim, S. Coelho, and A. A. Hyder, "Knowledge, attitudes, and practices around drinking and driving in Cambodia: 2010–2012," *Public Health*, vol. 144, pp. S32–S38, 2017.
51. E. Jelalian, S. Alday, A. Spirito, D. Rasile, and C. Nobile, "Adolescent motor vehicle crashes: the relationship between behavioral factors and self-reported injury," *Journal of Adolescent Health*, vol. 27, no. 2, pp. 84–93, 2000.
52. E. Habibi, A. Haghi, and M. R. Maracy, "Investigating the predictive of risk-taking attitudes and behaviors among Iranian drivers," *Journal of Education and Health Promotion*, vol. 3, no. 1, 2014.
53. Krug E. Injury: a leading cause of the global burden of disease. 1999; World Health Organization, Geneva.
54. Odero W, Garner P, Zwi A. Road traffic injuries in developing countries: a comprehensive review of epidemiological studies. *Trop - Med Int Health* 1997; 2:445-60

ANNEXURE I

Informed Consent and Questionnaire – English

Informed Consent

Title: Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh.

Interview ID no:

Date:

Hello and Welcome,

My name is Mir Abdur Razzak. I am a student of the Dept. of Public health at Daffodil International University, I am conducting research on Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh. The objective of the study is to assess Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients. I'm going to ask you some personal questions that some people find difficult to answer. Your answers are completely confidential. Your name will not be written on this form, and will never be used in connection with any information you tell me. You do not have to answer any questions that you do not want to answer, and you may end this interview at any time you want to. However, your honest answers to these questions will help us better understand Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients. I would greatly appreciate your help in responding to this survey. It will take about 10 minutes to ask the questions. Would you be willing to participate?'

Yes

☐

No

☐

(Signature of interviewer certifying that informed consent has been given verbally to respondent)

.....

INTERVIEWER INFORMATION

Results codes: completed (1) refused (2); partially completed (3); other (4)

INTERVIEWER: Code [___I___] Name_____

DATE INTERVIEW: ____/____/ 2022

CHECKED BY INVESTIGATOR: Signature_____ Date_____

Title: Knowledge, Attitude, and Practice of Traffic rules and regulations among male Motor Vehicle Accident (MVA) patients in Bangladesh

Questionnaire for Data Collection

Interview ID:

Section A: Socio-demographic Characteristics

Sl.	Questions	Coding Categories	Code
1	What's your age?		
2	What is your Education Level?	1. Illiterate 2. Primary education 3. Secondary education 4. Higher Secondary 5. Degree/Bachelor or More	
3	What is your Occupation?	1. Service 2. Homemaker 3. Business 4. Labor based work 5. Retired Person 6. Unemployed 7. Others _____ (Specify)	
4	What is your family's monthly income?		
5	What is the type of your living area?	1. Urban 2. Rural	
6	What is the type of your family?	1. Nuclear Family 2. Joint Family	
7	What is your marital status?	1. Unmarried 2. Married 3. Separated/Widowed	
8	Reasons for road traffic accidents among study	1. Over speeding 2. Overtaking 3. Bad Roads 4. Alcohol intake 5. Mobile Use 6. Others	
9	Previous exposure to RTA	1. None 2. Once 3. Twice 4. More than twice	

Section B: Knowledge of Road Traffic Rules

Sl.	Questions	Coding Categories	Code
1	Legal Age to acquire a driving license	1. <16 years 2. 16 to 18 years 3. >18 years	
2	Compulsory use of seat belt	1. Yes 2. No 3. Don't Know	
3	Compulsory use of helmet	1. Yes	

		2. No 3. Don't Know	
4	Ideal side to overtake	1. Right 2. Left	☐
5	Ideal side to walk on the road	1. Right 2. Left	☐
6	Prime importance to pedestrian	1. Agree 2. Disagree	☐
7	Reasons for road traffic accidents (RTA)	1. High speed alone 2. Driver's lack of awareness of traffic rules and regulations alone 3. Lack of strictness to implement Road traffic rules and regulations alone 4. All of the above reasons	☐
8	According to you, how much do you have knowledge of Traffic Rules and Regulations?	1. High 2. Moderate 3. Low	☐

Section C: Attitude towards Road Traffic Rules

Sl.	Questions	Coding Categories	Code
1	Driving before acquiring a license is all right	1. Yes 2. No	☐
2	Road signs and symbols help in reducing accidents	1. Yes 2. No	☐
3	Pillion or back seat rider must use helmet/seat belt	1. Yes 2. No	☐
4	Use of mobile phones while riding/driving	1. Agree 2. Disagree	☐
5	Convinced about the importance of seat belts	1. Very Strong 2. Strong 3. Weak	☐
6	Insistence on passengers' use of seat belts	1. Always 2. Sometimes 3. Usually 4. Never	☐
7	Reasons that make you use a seat belt	1. I like to comply with regulations 2. I am convinced of the importance of the use of seat belt 3. The seat belt has become compulsory practice 4. It is a civilized phenomenon	☐

Section D: Practice towards Road Traffic Rules

Sl.	Questions	Coding Categories	Code
1	You or your driver use a Seat belt during car driving	1. In the city 2. On highway 3. Both 4. None	☐
2	You or your driver use a Helmet during motorcycle driving	1. In the city 2. On highway	☐

		3. Both 4. None	
3	You or your driver have a valid driving license	1. Yes 2. No	☐
4	If you drive or your car/bus driver keeps speeding inside any city area	Kmph	
5	If you drive or your car/bus driver keeps speeding inside any highway	Kmph	
6	Action is taken when you remember to fasten your seat belt	1. I fasten it immediately 2. I try to slow down and then fasten it 3. I stop my car and then fasten it 4. I fasten it when any opportunity occurs	☐
7	Action is taken when you or your driver remember to wear a helmet	1. I wear it immediately 2. I try to slow down and then wear it 3. I stop my car and then wear it 4. I wear it when any opportunity occurs	☐

Interviewer Signature: _____

Date: _____

ANNEXURE –II

Time Frame of the Study: October 2022 to April 2023 (6 Month).

Sl.	Activity (Month wise)	1th	2nd	3rd	4th	5th	6th
1	Selection of Topic and Study Area						
2	Review of Literature						
3	Planning and Designing						
4	Ethical Clearance						
5	Preparation of Questionnaire and Pre-testing						
6	Data Collection						
7	Data Processing and Analyzing						
8	Report Writing						
9	Printing, Binding and Submission of Final Report						