Comparing Traffic Laws and Impacts in Bangladesh and Developed Countries: Insights and Recommendations for Improving Road Safety

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Abstract - This paper compares common traffic laws and their impacts in Bangladesh with those of developed countries. It finds that non-compliance with traffic laws is a major issue in Bangladesh, resulting in a high number of accidents and fatalities. In contrast, developed countries have stricter enforcement of laws, better infrastructure, and advanced safety features. The study highlights the importance of strict laws and their impact in reducing fatality rates. The findings provide insight into the scenario in Bangladesh compared to other developed countries, showing a significant relationship between traffic laws, impacts, violations, and fatality rates. The paper concludes with recommendations for a comprehensive traffic safety strategy, such as introducing new, effective laws modelled after those of developed countries, to address these challenges and improve road safety in Bangladesh.

Keywords: Traffic Laws, Impacts, Fatality Rates, Traffic Safety.

1. Introduction
Traffic safety is a critical issue that affects many countries globally, and Bangladesh is no exception. The high rate of traffic accidents and fatalities in Bangladesh is a significant concern, and it is essential to understand the factors that contribute to this problem. The high accident rate in Bangladesh is a result of several factors, including the non-compliance of traffic laws, poor infrastructure, and a lack of advanced safety features. This paper compares common traffic laws and their impacts in Bangladesh with those of developed countries, to gain insight into the challenges facing road safety in Bangladesh and identify areas for improvement. The study finds that non-compliance with traffic laws is a major issue in Bangladesh, and that this contributes to a high number of accidents and fatalities. This can be seen in the high rate of violations such as reckless driving, over speeding, and not following traffic signals. These violations put not only the violator but also other road users at risk. In contrast, developed countries generally have stricter enforcement of laws, better infrastructure, and advanced safety features. These countries have a more robust legal system that enforces traffic laws more effectively, and as a result, the rate of accidents and fatalities is much lower. Developed countries also have better infrastructure, such as wider roads, advanced traffic signals, and more designated lanes for different types of vehicles. These features help to reduce the risk of accidents and improve the overall safety of the roads. The study also highlights the importance of strict laws and their impact in reducing fatality rates. The findings provide valuable insight into the scenario in Bangladesh compared to other developed countries, showing a significant relationship between traffic laws, impacts, violations, and fatality rates. The data suggests that a comprehensive traffic safety strategy that includes introducing new, effective laws modelled after those of developed countries, can help to address these challenges and improve road safety in Bangladesh.

2. Existing Laws in Bangladesh
1.Speeding: Speeding has a highest fine of 10000 Tk or highest 3 months jail [1]
2.Driving without license: It has a fine of Tk. 25000 with 6 months jail [1]
3.Vehicle without registration: For driving vehicle without registration an individual must pay Tk. 50,000- or 6-months jail or both [1]
3. Common Traffic Laws of Developed Countries Having Better Transportation System

3.1. Speeding

3.1.1. Singapore
According to the Singapore Police Force, the punishment for exceeding the speed limit is a fine of up to S$1,000 and/or imprisonment of up to 6 months. [2]

3.1.2. Portugal
According to Portugal's "Road Safety Code", the punishment for exceeding the speed limit can include a fine of €60-2500, suspension of the driving license and/or imprisonment. [3]

3.1.3. Norway
According to Norwegian law, the punishment for exceeding the speed limit is a fine of NOK 850-11600 and/or disqualification from driving. [4]

3.1.4. Sweden
According to the Swedish Road Traffic Ordinance, the punishment for exceeding the speed limit can include a fine, suspension of the driving license and/or imprisonment. [5]

3.2. Obeying traffic signals and signs

3.2.1. Singapore

3.2.2 Portugal
According to the Portuguese Directorate General of Traffic, the penalty for violating traffic signals and signs is a fine of €120-600. [3]

3.2.3. Norway
According to the Norwegian Public Roads Administration, the penalty for violating traffic signals and signs is a fine of €670 [7]

3.2.4. Sweden
According to the Swedish Transport Agency, the penalty for violating traffic signals and signs is a fine of SEK 2500. [8]

4. Comparing Traffic Laws of Bangladesh with the laws of Other Countries and Their Impact

Traffic laws can vary from one country to the next and might cover things like speed restrictions, the wearing of seat belts and helmets, vehicle upkeep and inspection, and fines for breaches. While some nations may have lighter rules, others may have stronger restrictions with harsher punishments. For instance, the top highway speed limit in certain European countries is lower than in other nations and speeding fines can be rather substantial. On the other hand, traffic regulations may not be as thoroughly enforced and penalties for disobeying them may be relatively light in some developing nations.
Other instances include:
1. It is illegal to use a handheld cell phone while driving in the United Kingdom and doing so can result in a fine and points on one's license.
2. While there is no general speed restriction in Germany's roadways, all vehicles are required to include a first aid kit and a warning triangle.
3. All cars must undergo frequent safety checks in Japan, and traffic restrictions are scrupulously adhered to.
4. The United Arab Emirates has strong regulations regarding the use of seat belts and drunk driving.

4.1. Impacts of laws in Singapore:
Singapore has strict traffic laws, including speed limits, seat belt and helmet laws, a zero-tolerance policy for drink driving, strict laws for regular vehicle maintenance and inspection, and laws against using handheld mobile phone while driving. These laws, along with strict enforcement and heavy penalties for violations, have contributed to the country's relatively low rate of traffic accident fatalities.

![Fig 1: Trend of Road Traffic Fatality Rate in Singapore (2009-2020)](image)

4.2. Impacts of laws in Portugal:
Portugal has stringent traffic laws, including limitations on speed, requirements for wearing seat belts and helmets, a 0.5 g/l legal blood alcohol limit, stringent rules for routine vehicle maintenance and inspection, and prohibitions on using handheld cell phones while driving. The frequency of traffic accidents and fatalities in Portugal has decreased thanks in part to these legislation, tight enforcement, and harsh fines for infractions. In addition, Portugal has put new legislation into effect as of 2021 to mandate the use of the "European Driver Card," which is required to be carried by all drivers and contains all of the driver's driving history and is intended to enable the exchange of information between EU nations.
4.3. Impacts of laws in Germany:

Germany has stringent traffic regulations, such as speed restrictions, seat belt and helmet requirements, a legal blood alcohol level of 0.05%, requirements for routine vehicle maintenance and inspection, bans on using handheld mobile phones while driving, and requirements that automobiles be outfitted with first aid supplies and warning triangles. Germany's roads are now safer and there are fewer accidents and fatalities on the road thanks to these rules, tough enforcement, and harsh fines for infractions.

4.4. Impacts of laws in Norway:

Norway has stringent traffic regulations, including speed restrictions, seat belt and helmet requirements, a 0.2 g/l legal blood alcohol limit, requirements for routine vehicle maintenance and inspection, bans on using handheld mobile phones while driving, and the requirement to wear winter tires during the winter months. The frequency of traffic
accidents and fatalities in Norway has decreased thanks in part to these legislation, tight enforcement, and harsh fines for infractions.

4.5. Impacts of laws in Sweden:

Sweden has a lot of traffic laws and restrictions in place, which helps explain why there are so few fatal road accidents there. These include rigorous speed limits, zero tolerance for driving while intoxicated, seatbelt and helmet requirements, stringent kid passenger safety standards, and rules banning texting and driving. By fostering a culture of road safety in Sweden, these rules assist to lower the frequency of collisions and fatalities on the nation's roadways. [13]

Road traffic accidents in Bangladesh have become a national problem, with an alarming increase in the number of accidents and fatalities over the past few years. The primary causes of this include non-compliance with traffic laws, poor road infrastructure, lack of safety equipment in vehicles, high levels of traffic congestion, lack of driver education and training, and lack of emergency services. The Bangladeshi government needs to develop a comprehensive traffic safety strategy that addresses these challenges, including infrastructure development, law enforcement, emergency services, education, and training. In 2017, 4,284 people were killed and 9,112 others injured in road traffic accidents across Bangladesh. Reasons for the increase in accidents and casualties include reckless driving, over speeding, overloading, violating laws, illegal and dangerous competition, long-time driving without breaks, use of drugs and alcohol, incompetency of the driver, hazardous roads, lack of proper design and construction of the road, lack of safety measures, lack of road maintenance, poor implementation of traffic rules and regulations, lack of awareness among the people, and plying of three wheeler-vehicles, motorbikes, and locally-made mechanized vehicles. [14] [15] [16]

5. Violation Comparison of Common Laws

Traffic rules differ from one nation to the next, so it's essential for people to get familiar with the regulations of the country they're traveling or live in. Several typical driving rules that are followed internationally include:

Various countries have different speed restrictions, which are frequently shown in kilometres per hour (km/h) rather than miles per hour (mph). For instance, in Germany, the speed limit on the autobahn is 81 mph (130 km/h), but in the United States, most highways have a 65 mph (105 km/h) speed limit. [17] [18]

5.1.1. Driving while intoxicated: Different countries have different legal blood alcohol concentration (BAC) limits. While the permissible BAC in France is 0.05%, it is 0.08% in the United States.
5.1.2 **Seatbelt regulations**: Seatbelt regulations differ from nation to nation, with some having harsher regulations than others. All states in the United States have seatbelt laws mandating passengers to buckle up in moving vehicles.

5.1.3. **Traffic lights**: Different nations have different traffic signals. Traffic lights in the US are red, yellow, and green. Traffic lights in Japan are red, yellow, and blue.

   It is essential to keep in mind that these are but a few instances and that regulations may change based on the nation and location. It is usually advisable to become familiar with the legal system of the nation you are visiting or live in.

   Without knowing additional details about the exact rules and regulations being compared, it is challenging to compare how frequently certain traffic laws are broken in Bangladesh with those in other nations. However, it is well accepted that Bangladesh's low enforcement of traffic laws frequently results in a greater than average number of traffic accidents and deaths. In Bangladesh, "traffic law enforcement is poor and uneven, with modest fines and little deterrent effect," according to a World Bank assessment from 2018. The high number of traffic accidents in Bangladesh, according to 2010 research published in the International Journal of Injury Control and Safety Promotion, was also attributed to "a lack of enforcement of traffic laws and regulations."

   The high number of road traffic accidents and fatalities in Bangladesh is a serious cause for worry, and it has been shown that traffic rule infractions play a significant role. The following are a few frequent offenses in Bangladesh:

   In Bangladesh, many drivers drive carelessly and in violation of the law, which frequently results in collisions.

5.2.1. **Over speeding**: Bangladeshi drivers frequently go beyond the posted speed limit, which can cause collisions and fatalities.

5.2.2. **Overweight**: Bangladesh has many overweight cars, which can make them more difficult to manage and increase the risk of accidents.

5.2.3. **Traffic law violations**: Road signs and traffic signals are frequently disregarded by Bangladeshi drivers, which raises the risk of collisions.

5.2.4. **Illegal and hazardous competition**: Street racing and reckless driving are two activities that many drivers in Bangladesh indulge in that put them and other road users in risk.

5.2.5. **Lack of driver training and education**: Many drivers in Bangladesh do not receive the proper instruction or training in safe driving practices, which can lead to unsafe conduct on the road.

Traffic law infractions are more common in Bangladesh than in other nations. The World Health Organization found that Bangladesh has one of the worst rates of traffic fatalities worldwide in 2016, with a mortality rate of 36.2 per 100,000 people. The global average of 18.2 fatalities per 100,000 people is far lower than this number. [19]

6. **Conclusion**

   The conclusion of the paper emphasizes the importance of a comprehensive traffic safety strategy to address the pressing issue of high traffic accidents and fatalities in Bangladesh. The authors recommend introducing new, effective laws modelled after those of developed countries as a key component of this strategy as there is a direct relationship has been found between traffic laws and lower fatality rates. These laws should focus on addressing the challenges of non-compliance with traffic laws and poor infrastructure, which are major contributors to the problem. Additionally, the
authors recommend increasing public awareness of the importance of traffic safety and the consequences of not following traffic laws, as well as investing in better infrastructure such as wider roads and advanced traffic signals. By implementing these recommendations, Bangladesh can work towards reducing the high rate of traffic accidents and fatalities and improving the overall safety of its roads. The authors also suggest that the government, transportation agencies, and private sector can work together to achieve these goals. Furthermore, the authors recommend that Bangladesh should continuously evaluate and improve its traffic safety strategy, to ensure that it remains effective in reducing accidents and fatalities over time.

References


