

# The Decade of Action on Road Safety and Injuries Prevention: The Media Challenge in the 21<sup>st</sup> Century

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## ABSTRACT

Deaths and serious injuries are the challenges of the future due to the increasing load of vehicles on the road. Advertising and media campaigns for road safety are commonly employed by various agencies and governments. Effective planning to use these tools is needed to reduce the burden of morbidity and mortality due to the use of the roads. In the 21<sup>st</sup> century, with the expansion of roads and the increase in the number of vehicles, the threat of road crashes is also increasing. Different media are used to advertise and run campaigns for road safety. There is a strong need to understand the challenges to the media and effectively address these challenges to avoid serious injuries and deaths on the roads.

**Keywords:** Injury prevention, Road safety, Media challenge, Advertisements, Media campaigns.

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## INTRODUCTION

### Decade of Action of Road Safety and Injury Prevention

A UN resolution was adopted to celebrate the 2<sup>nd</sup> decade of action on road safety and reduce road crashes by 50% by the end of 2030.

A total of 1.3 million people die and 20 to 50 million people get injured due to road traffic accidents.<sup>1</sup> It is the eighth leading cause of death in the world and going to become the seventh leading cause of death by 2030. It is the leading cause of death in people from 5 to 29 years of age.<sup>2,3</sup>

In India, 4,12,432 road accidents occurred during the year 2021, with 1,53,972 deaths and injuring 3,84,448 persons. India is leading in the deaths due to accidents in the world. India has an 11% share of the deaths in the world due to road accidents<sup>4</sup> and is the leading cause of death in the age group of 5 to 29 years in India.<sup>3</sup>

In Nigeria, 1,834 people died in 3,345 road accidents from January to March 2022 and the main causes of these accidents were violations of speed and road signs, dangerous driving, overtaking wrongly, and bursting of tyres.<sup>5</sup>

In the first decade of action for road safety, five important aspects of road safety management, safer vehicles, safer road users, post-crash response, and safer driving environment were considered. These objectives were continued in 2<sup>nd</sup> decade of action (2021–2030) so that deaths and major injuries were prevented and their rate is reduced to 50% by the end of 2030. Traffic accidents remain a major health and developmental problem especially in some developing countries though some of the developing and developed countries have taken many steps to improve this situation.<sup>6</sup>

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A plan for 2<sup>nd</sup> decade of action on road safety was released in October 2021 It emphasized a holistic approach to improve the laws and implementation of laws, improvement of roads and vehicles, and proper care and treatment of crash victims along with the promotion of Stockholm's Declaration highlighting the right of all individuals to be able to enjoy the highest level of health and involving the promotion of public transport, cycling and walking. Reduction of accidents is required for the sustainable development of the world.<sup>7-9</sup> This was supported by the 3<sup>rd</sup> Global Ministerial Conference on Road Safety in which 80 countries participated.<sup>10</sup>

In secondnd decade of action on road safety has set 12 global road safety performance targets and tells what is to be done, by whom it is to be done and how it has to be done. It asks all countries to have a comprehensive multisectoral national road safety action program with time-bound targets by 2030; by 2030 all countries must accede to one of the core road safety-related UN legal instruments; all roads made should have at least a three-star rating; 75% of roads should have these standards; 100% new and old vehicles should have UN Regulations, Global Technical Regulations, or equivalent

recognized national performance requirements; half of the vehicles must travel at the posted speed limit; nearly 100% motorcyclists should use right type of the helmet; usage of car belts and child restraints in nearly 100% vehicles; halve the road traffic injuries and deaths; all countries to have laws prohibiting the use of mobile phones while driving; have laws for commercial drivers for rest and driving periods; and to reduce the time between crash and providing of emergency care to the victims. All these targets should be attainable by 2030.<sup>11</sup>

## Media and Its Types

Media is defined as “the main means of mass communication (broadcasting, publishing, and the internet).”<sup>12</sup>

Advertising media are the different platforms by which products or services can be marketed<sup>13</sup> and it can be through routine advertisements on television, radio, roadside billboards, messaging on mobile phones or different social media.

Road safety advertisements are meant to reach a target population, i.e., all those who use roads and can become victims of road traffic accidents and can be prone to injuries and deaths. Various means can be used including different types of media including social media. Various campaigns like anti-speeding campaigns have shown effective results. These campaigns can be run on various media e.g., using webpages like My space and Internet.<sup>14</sup>

Advertisements in the media used can be of different types: video types using television and YouTube; each having its benefits and advantages. TV advertisements are seen when people are relaxing and help to connect with them. On YouTube, it can be shown to those who are using particular types of content.<sup>13</sup>

Advertisements can be of different types varying from informative to persuasive and style can be emotional or humorous. Campaigns have been different at different times starting from respecting the road signs, overtaking is dangerous, drinking affects driving, driving at safe speeds, looking first then go, wearing helmets, wearing seat belts, using child safety restraints, crossing roads by pedestrians.<sup>15</sup>

TV advertisements are considered very effective for road safety. But it should be of sufficient duration, sufficient intensity, sufficient exposure and its timings should be good. A campaign lasting for one year is more effective usually. A consistent slogan helps in a better way to understand other things in the advertisement or campaigns. A serious approach is always considered better than a humorous approach. There should be limited themes and ideas for better results in a campaign. A key agency should manage all the advertisements for better results. There should be a combination of public relations and enforcement for better results.<sup>16</sup>

Billboard advertisements on the roadside can cause distractions resulting in accidents. The task-capability interface (TCI) model is a useful model for studying the behavior of the driver and roadside advertisements and it was observed that it increases crash risk, especially the digital billboards where information is constantly changing. Roadside billboards

are clutter in the environment and risky for drivers and road safety.<sup>17</sup>

## Social Media and Its Effectiveness

Social media can be defined as “websites and applications that enable users to create and share content or to participate in social networking.”<sup>12</sup>

Social media is one of the pillars of life nowadays and there are 4.65 billion users of social media at present. In 84% of Americans have at least one social media account, and 1 billion Chinese are users of social media.<sup>18</sup> Another survey finds the number of users at 4.90 billion. A typical user uses 6.6 social media platforms and is used by 85% of people have mobile phones. China is topping the number of users of social media with a whopping number of 1021.96 million users and India has 755.47 million users which in 2027 will become 1177.5 million. On average a person spends 2 hours and 25 minutes of his day on social media. Eastern Asia has the most social media users 26.6% and Central Africa has minimum users 0.46%. Most frequently social media is used by millennials and Gen Z 56% of men and 46% of women use social media. Social media penetration is biggest in the UAE (106.1%), India has a penetration of 33.4% Nigeria has a penetration of 15.4%, the USA has a penetration of 80.9% whereas global penetration is (59.4%).<sup>19</sup>

The most influential social media apps are Facebook, X previously known as Twitter and YouTube but for brands, it is Instagram.<sup>20</sup>

If we consider the monthly active users then Facebook is the most popular social media and has the biggest number of users (2958 million users), and second in the rank is YouTube having 2514 million users, and third in the series is WhatsApp with 2000 million users, followed by Instagram (2000 million), WeChat (1309 million), TikTok (1051 million) Facebook Messenger (931 million), Douyin (715 million), Telegram (700 million), Snapchat (635 million).<sup>21</sup>

## Current Scenario of Media and Road Safety

Best practices in the mass campaigns and prevention of road accidents have been researched and it was observed that road safety advertisements can lead by social persuasion to behavioral changes.<sup>22</sup>

Integrating advertisements with enforcement can improve mass media campaigns. We should plan the content according to the type of audience. We should choose the means of campaigns also according to the variety of the audience. Multiple forms of media are more effective than a single use of media.<sup>22</sup>

At least three exposures to advertisements are needed to be effective. Humorous appeals of road safety are more effective to males and fear appeals are more effective to females. There should always be ongoing surveys for behavioral changes to see the effectiveness of advertisements and road safety campaigns.<sup>22</sup>



Campaign objectives should be designed without any ambiguity. Advertisements and media campaign expectations must be realistic as they can give information and change attitudes but rarely change driving behavior and can be useful for setting the agenda. If threat appeals are made then its solution should also be provided so that people can adopt the safety measures. Media campaigns should always be evaluated to see their effectiveness.<sup>22</sup>

Awareness of the contents of the campaign helps in changing the results of the campaign. Awareness campaigns help in effective awareness but the cost factor is an important ingredient of these campaigns psychological concepts should also be understood to guide the campaigns. Fear arousal and coping with fear and self-efficacy are important factors that need to be taken into consideration while designing media campaigning.<sup>16</sup>

Lebanese road accident platform (LRAP) collects road crash events from online social media and provides input for studying vehicular crashes regarding the 465 billion population, districts, and road lengths along with seasonal changes in these accidents.<sup>23</sup>

In Poland most effective way of teaching about road safety is by those persons of road transport inspection who are dealing directly with road safety but the difficult part is putting this experience on the media.<sup>24</sup>

5GTN outperformed LTE in communicating road congestion and road weather conditions and safety-critical messages can be transferred better.<sup>25</sup>

### Media Challenge for the 21<sup>st</sup> Century

There is going to be an enormous increase in the number of vehicles in the coming years of the present century due to increased availability of vehicles and improvement in the financial conditions of the members of the society as well as increased financing of the vehicles by the various financial agencies. Media will have to modify the advertisements and campaigns for road safety. There is a need to study the ongoing research and plan future research to take care of the media so that media can be effectively used to prevent road crashes. Finances and technology will have to be understood for the better implementation of the campaigns. There is a need to study the failures of the campaigns and effectively plan in the future taking lessons from the previous media campaigns.

## MATERIAL AND METHODS

Google Scholar was used with the keywords injury prevention, road safety and media challenge. Google search was also used to find authentic facts not available on Google Scholar.

## DISCUSSION

Advertisements and media campaigns for road safety can be effective. What is needed at a particular place can be decided according to the budget and effectiveness of the media in a particular environment. In a region where internet and instruments to use are less, billboard advertisement can be

useful. Where people are uneducated pictorial advertisements can be more useful. In a society with abundance, social media can be better utilized. Where people prefer to stay indoors TV and radio campaigns may be more useful.

For the mass media campaigns to be successful timing and duration of the campaign as well as exposure of media placements and their intensity is very important and should be taken into consideration. Persuasive and emotional appeals seem to be more effective as compared to rational appeals just giving knowledge and are more effective if backed by theoretical models.<sup>16</sup>

Campaigns have been developed mostly to avoid overspeeding, avoiding drunk driving, using helmets, using seat belts and child restraints.<sup>26</sup> Over speeding is responsible for 40% of accidents in young persons and inculcation of fear among young persons through media campaigns can be a good way to reduce the accidents.<sup>27</sup>

We need to consider the following and plan accordingly for the use of media for road safety and prevention of injuries:

### Awareness Challenges

The population using the roads must be aware of the changing threat scenarios with the change in vehicular and road patterns. The development of highways and increase in the speed limit may bring altogether new types of threats to driving. Road users must be aware of the emerging challenges.

### Budgetary Challenges

There is a strong need for sufficient funds to be allotted for advertisements and media campaigns while allocating the budgets in the countries and various organizations.

### Unaffordability Challenges

Some poor countries may know what changes are good to be adopted on the roads but they may not be able to afford it. The UN must take into consideration such countries and should plan accordingly to attain its goals.

### Corruption Challenges

In some countries, corruption may be a big issue and despite the funds available may not reach the community to save them from road crashes. Effective laws and implementation of the laws should be present to curb corrupt practices at all levels of implementation of the projects.

### Technological Challenges

Need to find innovative ways so that advertisements and campaigns can be more effective. GPS can effectively monitor the behavior (speed of the vehicle) and deliver messages for road safety.

### Rural and Urban Challenges

Usually more focus is kept on the national highways and urban roads. Rural areas are often neglected during the construction and maintenance of the roads.

## Developing and developed nation challenges

Developing nations usually have a crunch of resources due to which effective maintenance of roads and vehicles may be an issue to be considered. Less police force may be available to implement the rules on the road to catch the violators

## Global outreach Challenges

Usually funds are allocated depending upon the pull and push of the stakeholders and rarely uniform allocation is possible even by international agencies.

## Continuous Research on this Subject

Sufficient funds should always be provided to analyze the various innovative methods that will be used in advertisements and campaigns to use the money effectively. Gaps in knowledge can be fulfilled by research which will be useful for the future.

## Sustainable Development Challenges

Sustainable development is possible only if people have good health and they can be protected from manmade hazards. Road safety is one such question that is manmade and media can be very useful in attaining this target.

## Improving Road Safety Behavior by Promoting risk Avoidance

tries to change the attitude of the drivers so that they drive safely thus reducing the number of accidents.

In 7<sup>th</sup> UN Global Safety Week was celebrated from May 15 to 21 with a theme of “Sustainable Transport” and a shift to walking, cycling and public transport and media will play an important role in creating awareness about this week.<sup>28</sup>

There should always be ongoing surveys for behavioral changes to see the effectiveness of advertisements and road safety campaigns.<sup>22</sup>

Threat appeals and humorous appeals causing fear in the masses can be a way to reduce the crashes on the roads e.g., possible injuries and deaths if not using helmets, seat belts, child restraints, following speed limits, respecting traffic lights and road signs. Such fear may improve driving behavior.

Children love cartoons and it will be a very good idea if the media can teach children the measures for road safety with the help of cartoon shows. Children will love to see it and children will have a permanent safety measure embedded in their brain and they will drive safely when the time comes for them to drive. They will also suggest to their relatives to adopt the safety measures and such relatives will be happy to listen to the children and their attitude towards safe driving will also change.

Preventions of accidents can be planned effectively by making plans for safer infrastructure, safer vehicles, quick and better emergency medical response, and better implementation of laws. There are some loopholes in the laws better laws can be made. It is important to make the public aware about all the reasons that cause accidents by using the budgets and media effectively.

## CONCLUSION

Best practices for media usage need to be adopted. Road safety advertisements/media campaigns need to be carried out effectively. It is important to design the campaigns for the factors which are being violated most or people are not aware of it. Campaigns that have been seen effective in one country can be used as a toolkit for another country There is an actual need to plan for the future so that we can prevent injuries reduce the mortality due to vehicular crashes and attain the goals of the 2<sup>nd</sup> decade for road safety by effectively using the media and having better plans for the operative use of the media to prevent mortalities and morbidities due to road traffic accidents.

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