

## A Successful Prototype of a Multipronged Helmet Campaign in a District of South India

Pallavi Sarji Uthkarsh<sup>1</sup>, Namratha B Reddy<sup>2</sup>, Utkarsha Lokesh<sup>3</sup>

<sup>1</sup>Associate Professor of Community Medicine, Shri Atal Bihari Vajpayee Medical College, Karnataka. India.

<sup>2</sup>Resident, Department of Anaesthesia, Rarajeshwari Medical College, Karnataka.

<sup>3</sup>Professor, Department of Maxillofacial Surgery, Shyamala Reddy Dental College. India.

**How to cite this article:** Pallavi Sarji Uthkarsh<sup>1</sup>, Namratha B Reddy<sup>2</sup>, Utkarsha Lokesh<sup>3</sup> et al. A Successful Prototype of a Multipronged Helmet Campaign in a District of South India. Volume 13 Issue 3 July-September 2022

### Abstract

**Background/problem:** Road traffic injuries are the leading cause of injury and death in the productive age group. Two-wheeler riders accounted for nearly half of fatal and nonfatal injuries. Head injury is the most common cause of death among them, which can be reduced by the appropriate use of the helmet. Though there was a law about the compulsory wearing of a helmet in the state, it was never enforced in the district and helmet usage rate in a district before the campaign varied from 1% to 5%.

**Methods:** 'Helmethon', a unique multi-faceted Campaign in the district of India was carried out for a period of three months in the year 2015 to promote helmet for prevention of head injuries. The campaign targeted the general public with a special focus on youth and stakeholders, who are responsible for enforcement of helmet legislation.

**Results:** Campaign was successful in sensitizing the community and drawing the stakeholder's attention towards the importance of preventing head injuries through enforcement of helmet law. The law was enforced in Tumkur district in less than a fortnight following the campaign and helmet usage rate among riders soon after enforcement had increased to 80% from a mere 1%.

**Conclusion:** A well planned and committed helmet campaign shall sensitize the community regarding helmet safety and encourages them to use it. It also influences stakeholders to enforce the helmet law with the least resistance.

**Keywords:** Injuries, Head injury, Helmet enforcement, Community Participation, Health Promotion, Injury prevention, Youth, Health campaign

### Introduction

Globally, Road traffic injuries (RTIs) kill 1.35 million people every year and rank as 8th leading cause of death<sup>1</sup>. Low and middle income countries like India attribute to 93% of these fatalities<sup>2</sup>. In India, deaths due to road traffic injuries have increased by 58.7% from 1990-2017<sup>3</sup>. In the year 2015, according to

MORTH data, Indian roads witnessed 1374 accidents and 400 deaths which amounts to losing 17 lives every hour!<sup>4</sup> and most disheartening fact is that part more than half of them were in the productive age group of 15-34 years<sup>1</sup>, who are the bread winners of the family. Two wheeler users form the vulnerable road users<sup>5</sup> as they are not protected by any protective shield .

**Corresponding Author:** Pallavi Sarji Uthkarsh

M.D, D.N.B, MNAMS, DPD, FAM, 233, West of Chord Road, 2<sup>nd</sup> Stage, 1<sup>st</sup> A main, Rajajainagar-86 Karnataka. India.

email: [pallavisarji@yahoo.com](mailto:pallavisarji@yahoo.com),

9945232944

Nearly 30% of road traffic accidents were reported among motorized two wheeler users<sup>4</sup> and head injuries are the common cause of death among them<sup>1</sup>. **By proper use of helmet**, 42% risk of fatal and 69% risk of non fatal head injuries can be reduced<sup>1</sup>. In spite of this proven evidence to prevent deaths and existence of Indian motor vehicle act 1988, which states that "Every person driving or riding (otherwise than in a side car, on a motor cycle of any class or description) shall, while in a public place, wear 2 [protective headgear conforming to the standards of Bureau of Indian Standards]"<sup>6</sup> still there was no strict enforcement of the law in many districts of India. It might be due to lack of support from the community or lack of priority of stakeholders such as the police<sup>5</sup>

Evidence from many countries showed that effective changes can be brought if "legislative measures are supported by sustained enforcement and by creating awareness among public regarding the effects of being non compliant"<sup>7</sup>. Hence a Helmethon, a Multifaceted Campaign was planned to sensitize the community, especially the youth and to bring stakeholders attention towards this safety initiative.

## Materials and methods

### Campaign Area

Karnataka the southern state in India which is one of the top 13 states contributing to 80% of road traffic accidents<sup>4</sup> of the country. The state has 25 districts, Campaign was done in a district of Tumkur, which is an educational hub spread over 10,598 km with important National and state highways passing through it<sup>8</sup>. It has a population of 2.68 million<sup>9</sup> and reported more than 6000 injury cases with an injury mortality of 58/100,000/year<sup>10</sup>. Nearly 45% of fatal head injuries and 35.5 % of nonfatal injuries were reported in two wheeler users.<sup>10</sup> There was no any enforcement of Helmet law and usage of Helmet was only among 1% in the entire district.

**Target population:** Campaign was targeted towards different stakeholders such as Superintendent of police, District Commissioner, political leaders, media and community especially the youth.

**Campaign duration and strategies:** Helmethon – campaign for helmet was done for a period of three months from March to May in the year 2015, with multipronged strategies such as Helmet Education, Formation of a group of young crusaders to promote

helmet, HELfie –Challenge, Stake holders Meet, Bike rally and flash mob, Pledge for helmet, inter college cultural events for helmets, Marathon for helmet after obtaining an ethical approval from the institution ethical committee and necessary permissions from the stakeholders.

## Campaign Strategies

### Classroom based Helmet Education

NSS officers and principals from different degree and professional colleges were met and briefed regarding the importance of helmet education to their students and they were requested to arrange a session on helmet education for their students preferably in the morning hours to have a good attention. This program covered 100 students each from six institutions i.e. 600 students. Students were administered a pre -tested, semi structured questionnaire to know the change in knowledge and attitude among them before and after the education program. Content comprised of, burden of injuries among two -wheeler users especially among youth, cause of death in crashes involving two -wheeler users, death rates among helmet and non-helmet users, how helmet acts a vaccine in preventing head injuries, type and quality of helmet to be worn, right way of wearing helmet, importance of pillars wearing helmet and importance of wearing a helmet irrespective of the law

Mode of Educational program was a didactic lecture with a power point presentation and a short movie clip promoting the helmet. The slides of the PowerPoint were made pictorial to grab the attention of the students.

**Formation of "Shell of Safety"- a gang of helmet crusaders:** After the helmet education youth were asked to come forward and volunteer to spread awareness about helmet among peers and public, which led to the formation of "shell of safety." With more than 200 youth coming forward as helmet crusaders who formed the backbone of all campaign activities.

**HELfie Challenge:** This challenge was inspired by the successful ice bucket challenge initiative, where youth were asked to post a selfie taken with a Helmet and post it in social media page of the campaign and invite others to take up the challenge. The HELfie with maximum likes would get Coffee shop VOUCHERS. This idea initially brought lot of youth to the page and

it became a platform to share ideas, messages and videos about helmet. Facebook page was active for more than six months and around 800 people actively participated in the Facebook campaign.

### **Stake Holders Meet**

Creating awareness about helmet safety to the students (youth) and to the general public involved the cooperation and support from various stake holders who played major role at the district level, such as district commissioner (DC), superintendent of Police(SP), University chiefs and the media. Stakeholders were met individually and a press meet was held to brief about the importance of such campaign in creating awareness. Stakeholders were given the statistics regarding number of lives that could be saved if helmet was made mandate. Press meet gave a wide publicity to the campaign and helped in spreading the word in the community. Stakeholders were also made a part of the campaign by inviting them as chief guests to various events.

### **Bike Rally and Flash Mob**

Preparation Pre-requisites involved permissions from District Commissioner, SP and heads of all institutions, police security and ambulance service. Rally sequence was planned after discussing with principals, students and NSS(National service scheme) officers of different colleges to utilize the tea and lunch break timings for flash mob, so that maximum crowd could participate or witness it. Youth were invited to prepare slogans, to design T-shirts, to prepare placards and posters for the rally and the best was rewarded. Youth were also invited to prepare for a flash mob, which was an integral part of the rally. Nearly 200 volunteers in 100 Bikes with placards and T-Shirts with slogans of helmet safety moved from one collage campus to other covering main streets and important traffic junctions of the city. 'Harley Davidson Riders Group' supported the campaign by joining the rally. This added a glamour quotient. Volunteers of Bike rally performed a flash mob at more than 30 junctions.

### **Inter Collegiate Events**

Intercollege competitions like helmet themed debate, essay writing, short movie making, Cartoons, photography, helmet painting, mime shows, fashion

show, singing and dancing were held. Nearly 25 institutions with more than 400 participants took part in these events. Stake holders like district commissioner, media, Superintendent of police, Vice chancellors were invited as chief guests of the program. The inter -college events were spread over a period of more than two months, which gave every participant more time to think and speak about helmet. All the participants and winners were rewarded in a concluding ceremony which was witnessed by more than 3000 youth. The highlight of the ceremony was the narration of real -life incidence by few people who lost their kins to head injures by not wearing helmet. Short movies prepared by the students were screened during the event and streamed in the social media platforms.

### **Marathon for Helmet**

2K -Marathon, the first marathon of the district was conducted in the month of April 2015 in Tumkur city to spread awareness about helmet to the public, nearly 2000 students of all educational institutions and more than 1000 general public and various stake holders such as superintendent of police, District commissioner, vice chancellors of the university, principals of the institutions, celebrities, NSS officers, media personnel took part in the marathon. Prior to the Marathon, necessary permissions were sought and wide publicity was given through celebrity ambassadors, local FM Radio, TV channels and newspapers. Road map for the Marathon was planned and volunteers for first aid services and refreshments were stalled at the planed junctions. T-shirts with slogans on helmet safety were given to the participants. The marathon of 2k started at 7 am at the Siddhartha engineering collage and concluded at the stadium. Post marathon, crowd was addressed by the celebrity regarding helmet safety.

### **Public involvement in the Campaign:**

Youth and general public voluntarily involved in the campaign as participants and spectators of the campaign.

### **Results/Outcome of the campaign**

Campaign was successful in getting the attention and participation of more than 10,000 youth from different educational backgrounds towards helmet

and its importance. Class room based education, Bike rally and flash mob, Inter collage events were successful in reaching more than 4000 youth directly and more than 6000 people through social media. Bike rally prompted many to buy helmet . The flash mob attracted the crowd towards the importance of helmet safety and encouraged them to come forward to take a pledge to wear helmet at all cost while on two wheeler. Nearly 5000 people did come forward and took a pledge to wear helmet.

The event made youngsters interact, think and discuss about helmet safety during preparation / rehearsals for the various events of the campaign. Campaign was successful in creating youth ambassadors for helmet . and sensitizing the community towards importance of helmet wearing. Campaign did draw the attention of various stake holders like superintendent of police, district commissioner and media towards the importance of helmet for both riders and pillions. Eventually the superintendent of police brought strict enforcement of helmet and seatbelt law in the district which increased immediate helmet usage in Tumkur district from a mere 1% to 80% within a week of enforcement.

## Discussion

To work towards achieving the sustainable developmental goal of reducing the morbidity and mortality due to road traffic injuries,<sup>7</sup> prevention activities need to focus on multiple approaches like education ,availability of safety/protective devices, suitable environment and legislation. Strict enforcement without priming or proper sensitization leads to resentment or rebellious attitude in the society and may turn out to be futile.<sup>5,11</sup> Helmethon, was such a unique campaign/initiative in India targeted towards prevention of head injuries by educating youth, through youth, and mobilised large amount of youth to pledge for helmet and take up the role of helmet crusaders. Most importantly, the campaign sensitized the stakeholders to enforce the strict helmet legislation. This approach can be a model for many districts to increase awareness, to reduce the resistance in the community for safety initiatives /injury prevention activities by sensitizing the community and stake holders.

The campaign faced several challenges from beginning till end. The first major challenge for the

campaign was funding. An attempt was made to collaborate with Rotary club, which some how did not materialize due to logistic issues. Road safety funds were explored too, with no success. Finally crowd funding proved to be successful.

The second challenge was getting the common free time of all the students to ensure full participation as it involved students from different courses with different time tables. We could overcome this by a detailed planning following discussion with the staff especially National service scheme coordinators of the Institutions and student representatives. None of the classes or examinations were disturbed due to the campaign.

Third challenge was to convince the stake holders and the head of institutions about the role of helmet in road safety. The head of institution had to be convinced about the role of helmet in road safety and also they had to be convinced that the youth had to be educated and made crusaders of helmet wearing. The campaign aimed at convincing them to wear helmet even if there was no strict helmet rule. Frequent meetings were held with the superintendent of Police, District Commissioner and media. Lot of evidence-based statistics had to be provided to them regarding the importance of helmet in saving lives in road traffic injuries. Eventually the compulsory helmet rule came into effect.

Fourth challenge was getting support and participation from the community/public. Advertising through Press meets, local FM and TV channels, Roping in a celebrity for various activities helped in grabbing the attention of the public towards importance of Helmet.

Fifth challenge was ensuring the safety of many youth who enthusiastically took part in the bike rally , flash mob and marathon. All these events happened all around the district for the first time. It demanded a detailed planning, support and supervision from police, doctors and public.

**Conclusions:** A committed, planned and well executed campaign with multiple strategies at a district level can attract and sensitize the youth, general community and stakeholders attention towards the importance of helmet in prevention of head injuries and can also bring successful enforcement of helmet legislature with least resistance from the community.

**What is Already Known:**

- Road traffic Injuries are a major public health problem taking lives of many youth
- Helmets reduce the risk of head injuries and hence death due to them.
- Enforcement of Helmet law is required to reduce head injuries
- Education combined with enforcement is required to increase the compliance of injury prevention activities

**What it adds**

- Youth could be a great strength/crusaders for injury prevention activities
- A committed campaign can attract the stake holders focus towards importance of enforcement of helmet law in prevention of head injuries
- Such campaign at the district level sensitizes the community and helps in enforcing the legislature for helmet with least resistance

**Competing interest:** none

**Funding:** Crowd funding

**References**

1. Global staus report on road safety 2018 [Internet]. [cited 2020 Apr 2]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/277370/WHO-NMH-NVI-18.20-eng.pdf?ua=1>
2. Road traffic injuries [Internet]. [cited 2020 Apr 2]. Available from: <https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries>
3. Mortality due to road injuries in the states of India: the Global Burden of Disease Study 1990–2017 - The Lancet Public Health [Internet]. [cited 2020 Apr 2]. Available from: [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(19\)30246-4/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(19)30246-4/fulltext)
4. Road\_Accidents\_in\_India\_2015.pdf [Internet]. [cited 2020 Apr 3]. Available from: [https://morth.nic.in/sites/default/files/Road\\_Accidents\\_in\\_India\\_2015.pdf](https://morth.nic.in/sites/default/files/Road_Accidents_in_India_2015.pdf)
5. Helmets-a road safety manual [Internet]. [cited 2020 Apr 3]. Available from: [https://www.who.int/roadsafety/projects/manuals/helmet\\_manual/1-Why.pdf](https://www.who.int/roadsafety/projects/manuals/helmet_manual/1-Why.pdf)
6. THE MOTOR VEHICLES ACT, 1988 [Internet]. [cited 2020 Apr 3]. Available from: <http://legislative.gov.in/sites/default/files/A1988-59.pdf>
7. WHO | Global status report on road safety 2015 [Internet]. WHO. World Health Organization; [cited 2020 Apr 3]. Available from: [http://www.who.int/violence\\_injury\\_prevention/road\\_safety\\_status/2015/en/](http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/)
8. Tumakuru district. In: Wikipedia [Internet]. 2020 [cited 2020 Apr 9]. Available from: [https://en.wikipedia.org/w/index.php?title=Tumakuru\\_district&oldid=949928561](https://en.wikipedia.org/w/index.php?title=Tumakuru_district&oldid=949928561)
9. Tumkur District Population Census 2011-2020, Karnataka literacy sex ratio and density [Internet]. [cited 2020 Apr 9]. Available from: <https://www.census2011.co.in/census/district/267-tumkur.html>
10. Gururaj G, Uthkarsh PS, Rao GN, Jayaram AN, Panduranganath V. Burden, pattern and outcomes of road traffic injuries in a rural district of India. *Int J Inj Contr Saf Promot.* 2016 Jan 2;23(1):64–71.
11. Application of Behavior-Change Theories and Methods to Injury Prevention | Epidemiologic Reviews | Oxford Academic [Internet]. [cited 2020 Apr 9]. Available from: <https://academic.oup.com/epirev/article/25/1/65/718686>