

## **Agility, Innovation and Impact: Pedestrian Safety Walkway Intervention in Kajang, Malaysia**

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### **Abstract**

Child pedestrian as a vulnerable group around the school area needs intervention to address their problem as their risk is high for sharing the roadway with vehicles. The problem here was high traffic volume with speed enough to be dangerous for children whom are exposed in open. Thus to reduce the child pedestrian risk on road, a pedestrian safety walkway intervention was mooted and grant proposals were bided and successfully obtained from donors. This resulted in the birth of a Pedestrian Safety Walkway with the aim of segregating the pedestrian from the vehicles whom are using the same roadway.

### **Background**

Child injuries are a growing global public health problem that requires urgent attention. At least a million children under the age of 18 years die from injury and violence (Peden M et al, 2004). The burden of injury to children decreases significantly in developed countries as compared to developing countries. Malaysia is also of no exception to this global child problem. Malaysian population were 30,073,353 and vehicle population stands at 25,101,192 for the year 2014. This resulted in 476,196 reported road crashes with 6,674 road deaths. Of these road death figures 23.9% (1,598) involved population below age 20 years (mostly school going children) and 7.7% (515) are pedestrian (Royal Malaysia Police, 2015). The 2<sup>nd</sup> Global United Nation Road Safety Week launched in 2013 with the theme on pedestrian safety gave birth to the innovation of idea to address the problem diagnosed among school children whom are travelling to school as a pedestrian. The innovation was to segregate the child pedestrian from other vehicle users whom are sharing the same roadway. The agility of building a Pedestrian Safety Walkway helped to eliminate the hazards faced by the school children on the road when interacting with vehicles. This resulted in the impact of reductions in hazards for children on the road around the school and reduced the risk of road crash involvement as a pedestrian around the school.

### **Methods**

A pedestrian safety intervention was initiated to segregate the vulnerable road users (pedestrians) from the traffic by building a Covered Pedestrian Walkway (277 feet long x 7 feet width) for Kajang Tamil School which has a high student population of 1178 and the school located in the CBD of Kajang town with high traffic volume movement. Justification for choosing the location was State of Selangor has the highest number of road crash in the country and within the state of Selangor, the District of Hulu Langat is one of the districts with high number of road crashes in Selangor and Kajang is the biggest township within the Hulu Langat District. The busiest part of Kajang Township is the CBD area and there are many schools around here and Kajang Tamil School was chosen for its high student enrolment with two school sessions in a day. It is an initiative by Safe Kids Malaysia Universiti Putra Malaysia with funding from Industries (FedEx and Global Alliance of NGOs on Road Safety and Safe Kids Worldwide USA). This initiative bridged the industries and community. Industries came forward to assist the needs of the school community and Safe Kids Malaysia Universiti Putra Malaysia facilitated the process by connecting them. To sustain this safe practice on road, through the 3<sup>rd</sup> Global United Nation Road Safety Week in 2015 with the theme Child Safety, a road safety club was launched in the school to run road safety programs for the school children.

## Results

The entire school community comprising of 1178 Children, 70 Teachers, 8 Staffs and 870 parents are using the pedestrian walkway which reduces their risk on road by removal of hazard. The way forward here is to make sure they use the walkway always for the benefits to be sustainable. This intervention has built a safe practice culture among this school community. The pedestrian safety walkway took some space of the roadway which resulted in reduction of space for motorway. This resulted in drop of vehicle speed which reduced pedestrian hazards on the road. There were no reported pedestrian crash around the school vicinity after the intervention came into place compared to before where there were reported road crash among school children around the school vicinity (near misses were not accounted for in this comparison). The follow-up initiative of opening up the school road safety club helped to sustain the good road safety practice in calculated. Through the school road safety club, education based activities were organised in the form of road safety talks, quizzes and exhibitions.



*Figure 1. The Pedestrian Safety Walkway Intervention: Before and After*

## Conclusions

The transfer of road safety knowledge from Safe Kids Malaysia, Universiti Putra Malaysia were able to transform the school community towards safer pedestrian. The removal of the road hazards has helped to create a safe walking pathway for pedestrians whom are vulnerable on a mixed traffic road. The limitation of this study was we missed the opportunity to collect primary crash data before the intervention. We can only collect the post intervention and compare by time of all post intervention stage. Alternatively, we explore for secondary data of road crash involvement reported to school and school absenteeism due to road crash involvement before and after intervention.

## References

- Royal Malaysia Police (2015). Statistical Report Road Accident 2014. Percetakan National Malaysia Berhad, Kuala Lumpur.
- Peden M. et al (2004). World Report on Road Traffic Injury Prevention. World Health Organisation, Geneva, Swisterland.