

EDITORIAL

ENSURING HEALTHY TRANSPORT

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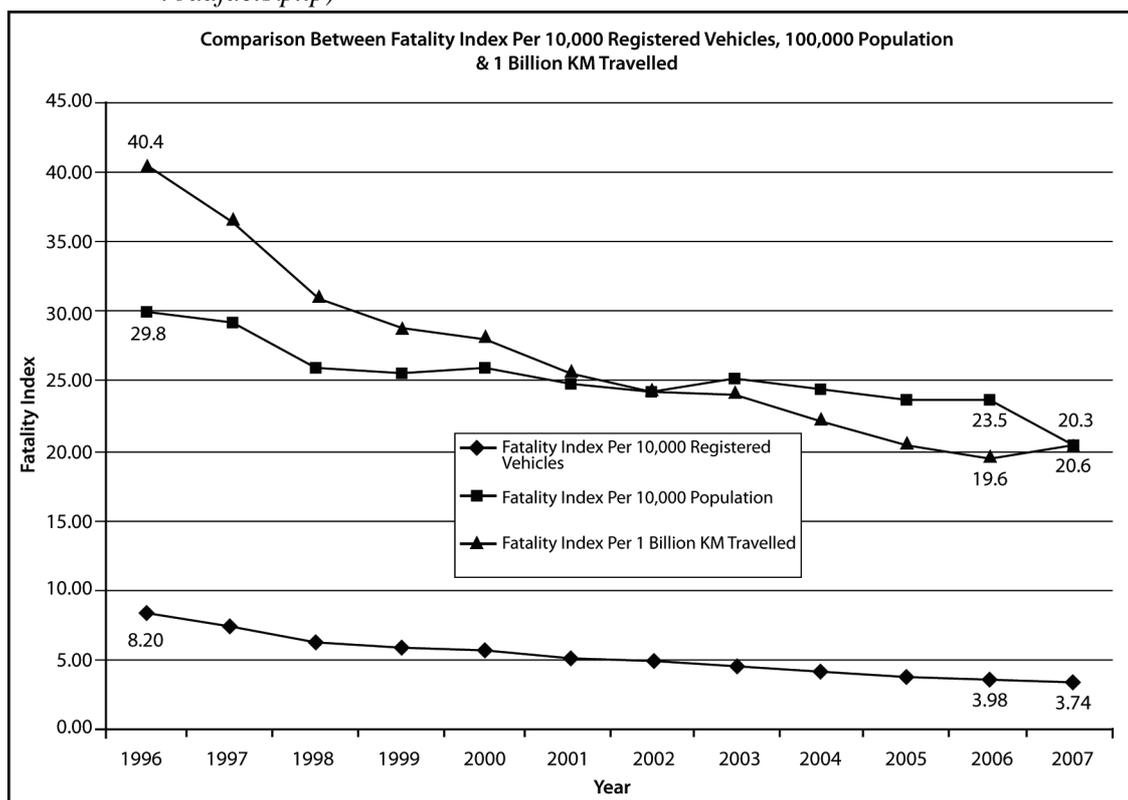


Transportation and health are often regarded to be of two different disciplines, as the former is seen to be more related to the engineering and planning sector, whilst the later is inclined towards the medical and health sciences. A closer scrutiny will however make many realise that indeed transport has links to our health. Most noticeable to the general public will be with regard to transport safety. The gory details portrayed by media following any disastrous accident, brings into our mind the need for the medical team to take charge from the immediate emergency procedures on site to the life saving procedures and subsequent rehabilitation periods to be experienced by victims

in hospitals.

My two months vigil at Ward 2 Selatan Hospital Universiti Sains Malaysia (HUSM) in June and July 2008, has made me more resolved towards linking transport and health. In this regard, the aim is to prevent accidents, and to make transport and travelling a healthier activity. At the moment, Malaysian accident record has improved, but is nowhere to be shouted about (see Figure 1). It is always sad to hear the incessant ambulance's siren wailing when entering HUSM bringing victims of accidents. Medical progress in emergency care, and life savings procedures, and the ensuing rehabilitation activities are amazing and need to

Figure 1 : Recent trends of three important road safety indicators for Malaysia (source: Malaysian Institute of Road Safety Research (MIROS), <http://www.miros.gov.my/roadfacts.php>)



continue progressing through research and development and aided by newer and modern techniques and technologies.

We need to prevent accidents, or at least make accidents less painful by reducing the fatality rate and the rate of serious injuries. How do we achieve this? The formula lies on a combination of having good drivers, driving good vehicles on good roads, coupled with greater awareness, better environment and effective enforcement. However, our concern is to get the best out of all them, as our aim is to reduce accidents and to reduce the severity of accidents. Let us see how transport and health can work together towards this common aim.

The Road and Safety Plan for Malaysia 2006 – 2010 have outlined nine strategies to achieve the nation's road safety goals, which are as follows:

1. Reduce the number of road death per 10,000 registered vehicles by 52.4% from 4.2 in 2005 to 2.0 in 2010
2. 10 death per 100,000 population compared the then current 23 death per 100,000 population, and
3. 10 deaths per 1.0 billion vehicle kilometre travelled compared to 18 deaths per 1.0 billion vehicle kilometre travelled. (Ministry of Transport, Malaysia, 2006)

The nine strategies outlined in the plan, provides the best platform for both engineers and players in the health sector to synergise their effort towards achieving the above objectives. The strategies are:

1. To enhance and sustain educational and psychological measures in road safety;
2. To utilize state-of-the-art technologies to reduce human error for more effective enforcement;
3. To enhance and complement engineering initiatives;
4. To enhance and achieve a more comprehensive and effective implementation of road safety initiatives and programmes through community participation involving employers, community leaders, politicians, religious leaders, educationists, professional bodies, voluntary organizations and youth groups;
5. To encourage modal shifts and use of public transport to reduce exposure particularly for high-risk groups, like motorcyclists;
6. To focus on critical gaps in road safety (other

than those already mentioned) with the aim of achieving the optimum cost benefit in resource deployment;

7. To focus on high risk road users most frequently involved in accidents i.e. motorcyclists/pillion drivers, car drivers and passengers and pedestrians;
8. To review and enhance road safety legislation; and
9. To promote fund sharing between the public and the private sectors for effective implementation of road safety programmes (Ministry of Transport Malaysia, 2006)

Many of the above strategies involve human behaviour and the challenge is to change human behaviour in order for it to be more amenable to safety and devoid of practices that can increase risk? This is not an easy task and one that may require psychological approaches, human behavioural approaches, and perhaps venturing into the potential of the brain science. Question on why a person changes his or her character to the worse, when he or she is in control of that steering wheel, remains to be answered? We need to know what factors influence driving behaviour, and whether we can influence that behaviour. Can enforcement do the work, or are education and awareness sufficient to do the job? These are questions desperately needing answers, before intervention programmes can be initiated.

The world road safety movement may have their idea about this issue, but whether they work for us in Malaysia, especially for people in the rural areas remains to be seen. Will different economic and social background influence differently, and is our present "catching-up mode", hence being in a state of haste, as a nation has anything to do with the behaviour?

Such questions warrant immediate and accurate answers if they are going to be effective towards achieving our aim to reduce road safety problems. We therefore need a synergistic research approach between the engineers and the health professionals and researchers.

The followings are some pressing issues. How can we change the attitude of drivers? The Malaysian Road Safety Department and the Malaysian Institute of Road Safety Research (MIROS) believe that education is important. They have formulated new syllabus for the driving school which are now more comprehensive. The syllabus

is in its latest stage of development and will be incorporated soon. Additionally, the aspects of road safety will now be integrated in the primary school's syllabus. How effective will this be towards changing the behaviour of drivers of the future will require monitoring and deep behavioural analysis

The relationship between transport and health goes beyond road safety. Let us scrutinise other issues relating to transport. An issue that is always associated with transport is congestion. Congestion is a society's menace and needs to be managed well. Otherwise, when it gets out of hand, we will see many resulting social ills. Research has shown that with congestion comes unreliability, which often brings stress and poor quality of life. One can imagine the stress levels commuters' face during congestion, when daily one begins the day being stuck in congestion and ending one's day, after the stresses of work combating congestion before one can arrive home.

With congestion, the probability of accidents is also higher and as such all associated issues relating to road safety now reappears for consideration. The higher number of accidents will also add pressure to the health sector.

Additionally, congestion also brings about higher air pollution through vehicle emission, and it is often quoted that vehicles are the largest contributor to air pollution. With it, also comes noise pollution as well as visual intrusion, which are all associated with health problems.

A synergistic approach towards the solutions to all these problems lies in the art and science of prevention. Prime target has to be human behaviour; in terms of their awareness and sensitivities on the issues, and whether they intend to be the agents of change. Appropriately, the tag line used by the government in campaigns is "*You can make the difference*". We need to find effective ways to mould and change human behaviour to influence the safeness of their driving, appropriateness of their travelling decisions, and their sensitivities on actions that would otherwise be detrimental to the sustainability of our transport system.

Research and development is also needed to control and manage travelling and driving behaviour to make it more effective, safe and sustainable. Effective enforcement, both self as well as external (like by the police), needs to play its role. This is to improve the "perception to be caught" index among Malaysians.

Obviously, the after effects in the emergency and health care needs improvement, as life matters, and it is our obligation to find ways to continually improve our position here.

In conclusion, transport and the health sector are indeed connected. It is now upon us to work together towards establishing a more sustainable transport situation by tackling the societal, economical and environmental elements and impacts.

About the Author

Professor Dr. Ahmad Farhan Sadullah is presently the Director General of the Malaysian Institute of Road Safety Research (MIROS). He was previously the Dean of School of Civil Engineering, Universiti Sains Malaysia, where he has been a lecturer since 1995.

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