



Photos by: LLia Goronov, Eill Cheyney y Clamur



The Newsletter of the Road Traffic Injuries Research Network (RTIRN)

www.rtirn.net

April-June 2011

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Dear colleagues and friends,

Road traffic injury research network (RTIRN) has a great role to advocate for research to reduce the burden of road traffic injuries, illuminate the important issues on road traffic injuries particularly in low and middle income countries (LMICs), to disseminate and promote the application and utilization of research to reduce the burden of road traffic injuries, to help develop capacity for road traffic injury research and technically support research activities are carrying out by nearly empty hand researchers in such countries.

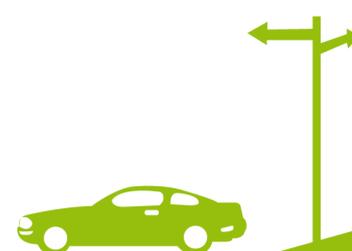
Research is a key element to reduce the impact of RTIs, advancement of safety of our universe and the quality of our lives. It needs technical as well as financial supports. It is obvious that the financial resources for research activities are quite low in many low and middle income countries. An unbalanced distribution of such research grants is also another problem needs to be addressed. Compared to many other public health problems, RTIs is a top priority in many countries, however the amount of research funds is granted to this important problem is quite limited.

1 Although human resources in research environment of road traffic injuries, are not too much in Low and middle income countries. However, each year tens and hundreds of men and women enter to profession of road traffic injury research activities. Many of them are young researchers in universities and research centers, in industry, in laboratories and in independent research organizations from low and middle income countries with low investment in the research. Related industry and other relevant sectors to road safety, benefits greatly from the new knowledge generated by research activities on safety and injury prevention and therefore should be responsible for supporting the cost associated with that enterprise. However, compared to high income countries, research grants on RTIs from the private sector, industry, donations, private individuals, foundations, and other scholarly supports are not available or are quite limited in these countries. Therefore, they need international grant supports.

There are challenges and opportunities on international research funds. Researchers from low and middle income countries require clear communication, careful planning, an organized approach and good research proposals to obtain such grants. They have to set up their research priorities on RTIs, identify best practices and focus on applied research works to control and prevent deaths and disabilities resulting from such injuries.

Hamid Soori, PhD

RTIRN Board Member



Message from the RTIRN Secretariat

Dear friends,

It gives me a great pleasure to inform you all that the Road Traffic Injuries Research Network won the **2010 Prince Michael International Road Safety Award**. We are very proud and honored for this highly distinction that our Network has received from the international community. We would like to thank our current and previous funders, and all our partners for believing in RTIRN.

On March 1st of 2011 the first RTIRN Board meeting of the year took place. During this meeting, the Board paid special attention to the participation from our community in RTIRN activities. They specifically instructed us to further facilitate the interaction between our partners. For that reason we developed the **RTIRN facebook** and **twitter pages**. These new tools, along with the Online Forum, will provide a stage in which our community can interact with each other to exchange ideas and points of view. On these new sites we will also post important news, events and discussions, as job and funding opportunities for you all. You can also contact us via these two pages about anything you would like to discuss. Please feel free to interact and use these new tools that are at your entire disposal.

On the same meeting the Board decided that the Network should disseminate the work done by our community for the **Decade of Action for Road Safety 2011-2020**. For that reason the Network will prepare a special webpage on our website devoted to present your plans to commemorate this special date. Please let our community know what are you and your institutions planning to do for this very important and massive global event. Your ideas and feedback are really important for us.

Finally, we would like to thank all of our partners that contributed in putting together this newsletter that intends to sum efforts with the World Health Organization which during this next month of June will be launching the **World report on disabilities**. Thanks again to our contributors without them the integration of this newsletter would have not been possible.

Thank you all!!!

Ricardo Pérez-Núñez
RTIRN Secretary, 2010-2011

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Contributions

🚫 Double jeopardy? Disability and road traffic injury



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Injuries inflicted by cars, cycles and other vehicles can lead to serious disability, requiring trauma care, rehabilitation and subsequently measures to promote participation, such as barrier removal. But it is also the case that people with disabilities are at increased risk of suffering injuries, for example as pedestrians, cyclists or wheelchair users. Meeting people with disabilities who have then sustained further road traffic injuries reminds us that disability is relevant to the road safety community in multiple ways. I personally have worked with two



women, both wheelchair users, who have been hit by motor vehicles, one of whom thus acquired a second spinal cord injury.

US research shows that children with disabilities were more than five times more likely to have been hit by a motor vehicle as a pedestrian or bicyclist as children without disabilities (Xiang et al 2006). Issues such as missing sidewalks, unsafe crossings and unsafe drivers have been identified as road traffic difficulties.

All those with an interest in disability should take note of the *World report on disability*, mandated by the World Health Assembly and jointly published by WHO and the World Bank, which will be launched in Geneva on 9 June 2011 by the Director General of WHO, together with other high level representatives, dignitaries and other stakeholders. The *World report* summarizes the best available scientific evidence on disability and makes recommendations for action in support of the Convention on the Rights of Persons with Disabilities (2006). The *World report on disability* addresses the need for better research and data and includes the first update of WHO's disability prevalence estimates for more than thirty years. The *World report* highlights discrimination and barriers, identifies needs and provides an analysis of what works to improve the lives of people with disabilities in the areas of health, rehabilitation, support services, information, infrastructure, transportation, education and employment.

The *World report* is of great relevance to efforts to promote health, rehabilitation and inclusion for those rendered disabled by injury on the roads. While the *World report* is not directed at prevention of disabilities, it does highlight the need to protect people with disabilities from secondary conditions, co-morbidities and other adverse sequel of their primary condition, which include road traffic injury. I hope the road safety community can do more in future to address the additional vulnerabilities of children and adults with disabilities, who make up a significant minority of the population.

✳ Quality of life after hospitalized road traffic injuries: a cohort study in Vietnam



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Annually in Vietnam, there are approximately 15,000 deaths (or about 16 deaths/100.000 population) as a result of road traffic injuries (RTIs), accounting for more than 40% of deaths due to all injuries. In addition to these, with more than 7,000 road traffic crashes each year, it is believed that tens of thousands of others would suffer from permanent as well as short term disabilities. To date, data on the burden of disease, including disability, following an RTI, are surprisingly in short supply in Vietnam. This situation limits the ability to focus on data-oriented measures of RTI control that could potentially mitigate the incidence and burden of RTI. To fill in this gap, we have conducted a prospective cohort study on the quality of life of RTI victims hospitalized in a Thai Binh provincial hospital. Participants were recruited consecutively from January 2010 to August 2010. They have been followed-up to report on their quality of life measured by Health Utilities Index 3 at one, two, four and twelve months after hospital discharge. We are expecting to present some preliminary results in early October 2011, upon the finishing of the twelve month follow-up of all study participants.



✦ The Incidence of Disability caused by road traffic injuries; a Study in Thailand



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Road traffic injury is a major problem in Thailand. It affects public health, the quality of life and social quality. The highest impacts are death and disability. The study was done from December 2005 to June 2006 in 8 hospitals which were chosen from 28 sentinel sites and aimed to study the incidence of people with disabilities following a road traffic injury. The sample populations are 2 groups, non – severe injured (not admitted) and severe injured (admitted). The disabilities followed were done for 12 months after their discharged to confirm the permanent disability. Results showed 14,698 cases in the non severe group and 9,737 cases in the severe group. After follow up, there is no disability in the non severe injured, however, impairments were found. In the severe injured there are 4.6 % facing disabilities, 5.6



% died in a hospital and 1 % died at home. 75.6 % of the patients have mobility disabilities, 7.4% have visual disability, 7.4% mental or behavioral disability, 5% have hearing or communication disability and 4.6% have intellectual or learning disability. The result showed the mortality rate is higher than the disability rate in contrast to some studies aboard. This may imply that the surveillance system should be more focused, as well as the acute care phase, in order to prevent complications that lead to disability.

✦ Disabilities from road Traffic Injuries in India



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More than 91% of fatalities from road traffic injuries occur in low-middle income countries. Lack of reliable and good quality national or regional data has thwarted the recognition of disabilities resulting from road traffic injuries as a major public health challenge in India.

Table 1: Number of Crashes and Number of Persons Involved : 2001 to 2008

Year	Number of Crashes		Number of Persons		Crash Severity*
	Total	Fatal	Killed	Injured	
2001	405637	71219 (17.6)	80888	405216	19.9
2002	407497	73650 (18.1)	84674	408711	20.8
2003	406726	73589 (18.1)	85998	435122	21.1
2004	429910	79357 (18.5)	92618	464521	21.5
2005	439255	83491(19.0)	94968	465282	21.6
2006	460920	93917(20.4)	105749	496481	22.9
2007	479216	101161(21.1)	114444	513340	23.8
2008(P)	484704	106591(22.0)	119860	523193	24.7

(P): Provisional; Source: Information supplied by States/UTs. Figures within parenthesis indicate share of fatal crashes (i.e. involving death) to total crashes. * Crash Severity : No. of Persons Killed per 100 Crashes

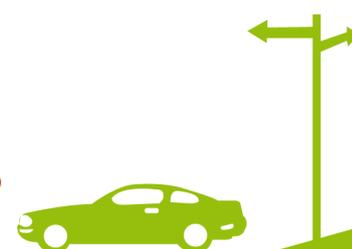


Table 1 gives the profile of road crashes and its severity in India for all the States/UT's. Examples of injury-related impairments resulting in disabilities include:

- Physical and/or cognitive limitations due to neurotrauma
- Paralysis due to spinal cord trauma
- Partial or complete amputation of limbs
- Physical limb deformation resulting in mobility impairments
- Psychological trauma
- Sensory disability such as blindness and deafness
- Hospitalizations (for short and long periods) and emergency care

According to WHO 2002, the disability rate in India was 2.1%. The disabilities of all types were higher in rural areas, and more among men as compared to women. In a report in 2003 it was found that the prevalence of mental retardation, mental illness, visual, hearing, speech and locomotor disabilities was 4%, 7%, 11%, 10%, 5% and 53%, respectively. According to Ministry of road transport and highways in 2008 it was observed that the nearly half of the road traffic casualties are in the age group (25-45 years), the key wage earning age group.



A trauma care system encompassing pre hospital (emergency), hospital (acute care) and post-hospital (rehabilitation services) care is an essential component of preventive and control strategies. Further political support for injury prevention is also important in India

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✦ Disability resulted by RTIs remains concealed: An example of Nepal



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A study* conducted in Nepal in 2001 found that about 9% of the surveyed households had at least one disabled person. Of the total 76,000 people surveyed, 1.6% was disabled. Injuries were the leading cause of manipulation disability and the second leading cause of disability related to mobility. However, these statements do not provide knowledge of the relation between road traffic injuries (RTIs) and disability.

Apparently, this survey hardly found 10 persons surviving with a disability caused by motorized-vehicles. Most of the disabilities caused by RTIs remained unaccounted. As cited in the report, "... disabilities caused by vehicular collisions are not very common because of the government policy which obliges the perpetrator to look after the victim throughout its life." This report also claimed that many of the injured persons were allegedly, killed by the drivers at the scene so that they only require to pay a certain amount of penalty. This in turn leads to high fatality rates for RTIs.



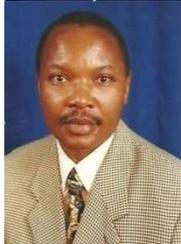
Motorbike crash in Kathmandu. In Kathmandu 4,104 road crashes occurred in 2010 killing 146 persons (Photo by Sabin Baral <http://www.demotix.com>)



This indicates towards development of community based study keeping the above facts in mind and hence the need for developing survey questions to deal with the concealed disabilities resulted from RTIs.

* UNICEF and the National Planning Commission of Nepal (2001). *A situation analysis of disability in Nepal*. Conducted by New Era, Kathmandu, Nepal

The Effects of Road Traffic Injuries on Functional Outcomes in Kenya



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Non-fatal Road Traffic Injuries (RTI) may affect an individual's status of health. A pilot study was conducted to explore this claim using RTI patients attending the Rift Valley Provincial General Hospital, Nakuru County, Kenya.

A sample of 22 patients attending this hospital from 1st January 2010 and 31st July, 2010 was surveyed. Injury severity was measured using the Abbreviated Injury Scale (AIS) while the Quality of Well-being Self-Administered (QWB-SA) questionnaire was used to assess health status. The QWB-SA is a validated measure of functional limitations. It ranges from 0 (death) to 1 (perfect health).

The mean age of the sampled patients was 34.41 years (SD = 8.58). Males accounted for 59 percent of these patients. The patients had a mean AIS of 3.89 (SD = 0.94). At discharge, the patients had a mean QWB-SA score of 0.349 (SD = 0.132).

A statistical model relating injury severity to functional outcomes was investigated. In order to obtain accurate statistics using a small sample, the model was estimated from the Bayesian paradigm. This involved specifying a prior distribution and updating it using available data, with the help of WinBUGS software. When controlling for age, sex and education, the results show that injury severity exerts a negative effect on quality of life ($\beta = -0.07967$, CI -0.1501, -0.0085). Therefore, injury severity is associated with poor quality of life outcomes. Data collection is still going on.



We welcome our new partners to the RTIRN

Argentina:	Ana María del Carmen Chalabe
Australia:	Zuhair Ebrahim, Suzie Drayton,
Brazil:	Roberto Victor Pavarino Filho, Mercedes Noem Maldonado Banks
Egypt:	Mohamoed Abdel Maguid Tolba Momen, Ohoud Yoseef elSheikh
India:	Urfi Islam, Sony Thomas,
Iran:	Monfared Ayad Bahadori
Mexico:	Daniel Vera Lopez, Raul Alberto Peniche Mendoza, Ana Mendez, Juan Velazquez
Pakistan:	Muhammad Tufail, Ejaz Ahmad Khan
Sri Lanka:	Hewage Piyadasa
South Africa:	Collins Phutjane Letsoalo
Thailand:	Daranee Suvapan
Uganda:	Patience Muwanguzi
United Arabs Emirates:	Natasha Clements
USA:	Mauricio Luis Pinet Peralta, Jeffrey Craig Lunnen, Molly Tran
Vietnam:	Hung Viet Nguyen

Publications

Hyder AA, Lunnen J. Reduction of childhood mortality through millennium development goal 4. *BMJ* 2011;342:d357. <http://www.bmj.com/content/342/bmj.d357.full>

Hidalgo-Solorzano E, Campuzano-Rincon J, Rodriguez-Hernandez JM, Chias-Becerril L, Resendiz-Lopez H, Sanchez-Restrepo H, et al. [Use and non-use of pedestrian bridges in Mexico City. The pedestrian perspective]. *Salud Publica Mex* 2010;52(6):502-10. <http://www.ncbi.nlm.nih.gov/pubmed/21271008>

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Bhatti JA, Razzak JA, Legarde E, Salmi LR. Burden and factors associated with highway work-zone crashes, on a section of the Karachi-Hala Road, Pakistan. *Injury Prevention* 2011;17:79e83. doi:10.1136/ip.2010.027532. <http://injuryprevention.bmj.com/content/current>



Launch of the Johns Hopkins International Injury Research Unit as WHO collaborating center

On Tuesday, March 15, 2011 The Johns Hopkins International Injury Research Unit was named WHO Collaborating Center for Injuries, Violence and Accident Prevention. For more in detail information and pictures of the event go to:

<http://www.jhsph.edu/iiru/news.htm>

We would like to congratulate Dr. Adnan Hyder and all his team for this accomplishment. Congratulations!!!

Decade of Action for Road Safety 2011-2020.

On May 11th 2011 the UN General Assembly and the international community are planning the global launching of the Decade of Action. The RTIRN will commemorate this important date by showcasing on our website the plans you and your institutions have for this date, please share it with our community. Send them to our emails administrator@rtirn.net or secretariat@rtirn.net.

Save the dates!

April 11th, 2011; London, UK

The Prince Michael International Road Safety Award will be presented by The Prince Michael Himself to the RTIRN. Dr. Adnan Hyder as Chairman will receive it - during the UN Road Safety Collaboration meeting in London.

6th, 7th and 8th April 2011; Peñaflores, Chile

The 1st Latin American Regional Community Conference on Safe Communities. For more information go to <http://www.penaflor.cl/web10/> or contact Eduardo Jorquera Cabello at edoJORQUE@yahoo.com

June 30th 2011, 9am – 4pm; London, UK

Youth, Gender & Road Risk – A Road Safety Forum International Congress open for bookings!!!!

For more details go to www.roadsafetyforum.org/events.

Launching of the Decade of Action, May 11th 2011

The United Nations Road Safety Collaboration has developed a Global Plan that provides an overall framework for activities which may take place in the context of the Decade.

For more details visit <http://www.decadeofaction.org/>

June 9th of 2011; Geneva

WHO alongside with the World Bank will launch the *World report on disability* at the WHO'S Headquarters located in Geneva, in the presence of high-level representatives from Member States, celebrities with disabilities, together with representatives of disabled people's organizations, professional groups and non-governmental organizations, followed by a half day technical session on how to implement the World report on disability.

10th National Conference on Injury Prevention and Safety Promotion, November 2nd-4th 2011; Brisbane, Australia

Call for abstracts. Submission deadline: May 9th 2011.

For more details go to <http://www.icebergevents.com/injuryprevention2011/>

If you know about any future event and would like to share it with all RTIRN partners, please send an email to: administrator@rtirn.net



Make the RTIRN newsletter your own!

- Have news of road traffic injuries research in your region?
- Intervention projects?
- Upcoming events or new publications?

Share it with us at the following address: administrator@rtirn.net

Have you registered for the New RTIRN Online Forum?

The new forum enables RTIRN Partners to communicate more effectively, participate in online discussions and stay updated with current Network activities.

Please visit http://www.rtirn.net/online_forum.asp to register today!

RTIRN on Facebook and Twitter

You can follow us on facebook and twitter. Now our partners will have a better platform to connect with each other. Look on Facebook: RTIRN and on Twitter: @RTIRN. You can also contact us via both pages and discuss any subject and doubt you may have.

Feel free to use both of these new tools that are at your entire disposal.

To become a RTIRN partner

To become a partner of the Road Traffic Injuries Research Network, please visit our website at www.rtirn.net and register.

For further inquiries, please contact:

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Designed by: Paola Navarrete Guadarrama

