### Disability and Road Traffic Injuries:

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• Decade of Action for Road Safety: 2011-2020



World Report on Disability & Rehabilitation



• Social Determinants of Health



## "Burden" or impact of Road crashes are described in many ways

- 1.3 million road deaths per year, more than 90% occur in low- and middle-income countries (LMICs) which have only 48% of world's registered vehicles
- 20 to 50 million injured on roads, accounting for 30-86% of trauma admissions in LMICs
- Vulnerable Road Users' (pedestrians, bicyclists, motor-cyclists)
  more likely to be killed and suffer serious injury in crashes,
  compared with car occupants
- Road traffic injuries account for 1-2% of Gross National Product in many countries; major impact on constrained health care systems; significant financial burden on families due to out-of-pocket payments etc (contributes to "poverty trap")

# Increasing recognition of the importance of RTI-related disability

- Head and spinal cord injuries, burns and limb injuries resulting in significant longer-term consequences
- Psychosocial effects and reduced quality of life
- Socio-economically disadvantaged groups and ethnic minorities face greater barriers accessing care and necessary support services following injuries
- Significant need for studies in low- and middle-income countries where environmental barriers can be particularly high, compounding the difficulties posed by physical aspects of injuries (Allotey, et al. 2003, World Report on Disability 2011)
- RTIRN April 2011 Newsletter profiles several studies in progress

### Approaches to measuring disability

- Disability is a complex multidimensional experience.
- The way "disability" is conceptualised is a critical influence on estimates of disability. This is important to consider in addition to other methodological challenges noted in previous research
- Aspects of disability measured in research:
  - Impairments, activity limitations, participation restrictions, related health conditions, environmental factors
- "Impairment data are not an adequate proxy for disability information" - World Report on Disability
- Introducing Dr Tom Shakespeare.....

#### References

- World Health Organization. World Report on Disability, June 2011
- Ameratunga S, Norton R, Bennett D, et al. Risk of disability due to car crashes: a review of the literature and methodological issues. *Injury 2004; 35, 1116-27*
- Allotey P, Reidpath D, Kouame A, Cummins R. The DALY, context and the determinants of the severity of disease: an exploratory comparison of paraplegia in Australia and Cameroon. *Soc Sci Med.* 2003;57:949-58.

#### Articles from presenter's work, referred to at question time:

- Hosking J, Ameratunga S, Bramley D, et al. Interventions to reduce ethnic disparities in the quality of trauma care: a research gap. *Annals of Surgery 2011; 253: 233-7*
- Ameratunga S, Norton R, Connor J, et al. Longer-term changes in health related quality of life among survivors of serious crashes: findings from a population-based cohort study of car drivers. *Annals of Emergency Medicine 2006;48:729-36*
- Arlidge B, Abel S, Asiasiga L, Milne S, Crengle S, Ameratunga S. Experiences of whānau/families when injured children are admitted to hospital: a multi-ethnic qualitative study from Aotearoa/New Zealand. *Ethnicity & Health 2009; 14:169-83*